PSYCHOLOGY

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WHAT IT HAS TO TEACH YOU ABOUT YOURSELF
AND THE WORLD YOU LIVE IN

By

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PREFACE

THE chapters in this book were given as lectures at Cooper Union, New York, and were part of the regular work of The People's Institute. They are published with almost no change or revision. The manner of presentation is therefore that of spoken discourse, and as the reader will observe, differs from that of the ordinary text-book.

I have retained the lecture form because I think it has certain advantages. It is more readable, less technical in terminology, and the subject-matter should be more easily understood by the beginner and the average reader.

It should be borne in mind that the course is primarily an introduction to Social Psychology. But in order to gain a psychological method which would be of value for the understanding of social behaviour it was necessary first to work over some of the unsolved problems and disputed hypotheses of general Psychology.

The science of Psychology – if it may yet be considered a science – is at present in a very confused state. The profession is divided into partisan sects. A controversial spirit prevails which is frequently more suggestive of the theologian than the man of science. I have sought to give the student the standpoint of each of the several schools, to discuss the merits of each and point out what would seem to be its limitations, also to attempt a synthesis whenever possible. I have not tried to make the book a systematic outline. Much that is of genuine psychological interest is necessarily omitted. The aim was to select and emphasize in such a manner as would show what present-day Psychology is all about, and what it has to contribute to a solution of the problems of living.

There is an apparent need of a book which will state simply and clearly the aims and methods of this developing science, show what Psychology is and is not, give the reader a better knowledge of the problems concerning which there is difference of opinion among psychologists, and finally lead the student to a somewhat clearer insight into the meanings of

certain forms of individual and social behaviour. I trust that the publication of these lectures will in some measure serve to supply this need.

The sociological applications of the Psychological method in the last part of the book are only a few of the many contributions which Psychology has to bring to the discussion of social problems. They should, however, give the student a new method of approach to certain social and political questions.

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PSYCHOLOGY

CHAPTER ONE

WHAT PSYCHOLOGY REALLY IS

Its Uses and Abuses

§ 1

WHAT is Psychology? We are deeply interested in this question, and it is right that we should be. The psychological point of view is to-day making changes in the world's thinking which are perhaps as great as were those which resulted from Darwin's work in the nineteenth century. Wherever human behaviour of any sort takes place, there is a psychological fact. In a sense, we may say that psychology is the attempt to take a scientific view of human behaviour. Professor McDougall says: 'The aim of psychology is to render our knowledge of human nature more exact and systematic, in order that we may control ourselves more wisely and influence our fellow-men more effectively.' This would not be a complete definition of psychology, because psychologists also study the behaviour of animals. But we are in this book interested in understanding human nature, and we wish to know in what way psychology can be of help to us.

We all have a sort of amateur psychology derived from common sense and from experience. We have certain ways of 'sizing people up.' We judge pretty quickly whether we would like to have an individual for our friend; whether we would trust him; and whether he has a striking or capable personality. We are always predicting what So-and-so would do or say under certain circumstances. We have learned that certain things about ourselves will interest other people; that some things please them, or perhaps make them angry. We see that certain habits of our neighbours or of ourselves are good or bad. We do not hesitate to say that certain people are queer, or that certain movements like mobs are 'hysterical.' Moreover, each one of us has some sort of an idea about himself. We say that we like music or honesty or John Smith;

or as a journalist once said to me, 'I hate children and tripe and Democrats.'

Probably this journalist did not realize that he was making a psychological statement; but he was. For all these things are in a crude way psychological judgments. To be sure, they are not what can be called scientific judgments, for they are often prejudiced and based on insufficient observation, and so often erroneous. The journalist may be correct in stating his dislikes. He may be giving a fairly good picture of certain aspects of his character, but he probably cannot say why he has these prejudices and dislikes. To learn why would require a more careful analysis than we are ordinarily able to make either of ourselves, or of our neighbours.

§ 2

FICTITIOUS VIEWS OF HUMAN NATURE

It is for the lack of such careful and technical analysis that we are so often mistaken about human nature. For instance, a great many people since the war are disillusioned, or are trying desperately to save their faith and their social ideals. Before 1914, many of these people had certain humanitarian beliefs. They accepted the doctrine that man was naturally good and reasonable – if only he were not kept down by evil environment. Now we see people behaving in ways that surprise and startle us. Many of us do not know what to think. Some become cynical; others feel that they have lost their ideals. Many feel that civilization is bankrupt.

What most of us forget is that our older prevailing ideas of human nature were, for the most part, matters of dogmas and creeds, inherited from an age which had not yet learned to study human nature scientifically. Most of our political, religious, social, economic, and ethical theories are based upon old-fashioned fictions about mankind. Somebody, a philosopher, let us say, who knew much about books and abstract ideas, sat in his den and constructed in thought an

imaginary man. About this man he held various made-in-advance notions, usually devised to suit the purpose of his particular philosophical system.

These notions, to be sure, were well intended. Often they represented the philosopher's rebellion against what he regarded as medieval superstition. He had been taught that man was a 'sinner,' that his nature was corrupt and prone to evil. The philosopher had seen that the application of reason to the facts of nature was greatly revolutionizing the old medieval picture of the world about us, so he concluded that a like revolution of our view of human nature would occur. In this he was probably correct. But what he often did was merely to say that, whereas medieval thinkers had said that human nature was all bad, modern knowledge must declare it to be naturally good. This is what Rousseau did. He said in substance that man is essentially reasonable and that, given a chance, mankind would find happiness in a rational way. Immanuel Kant, the great German philosopher who lived at the close of the eighteenth century, also held the view that man was essentially rational and that the laws of his reason were universal, applying even to divine beings. The same rationalistic view of human nature was rather typical of our older thinkers. It occurs in Plato and Aristotle. Among modern thinkers it has been a favourite doctrine of the older liberalism and is a presupposition held by many Marxian Socialists. Consequently, most of our political and social theories are based upon views of human nature which at best were pure assumptions and guesswork. Where did our older thinkers get this view? They did not go out and study people. In fact, with all their learning they did not know half as much about people and what they think and do, as you and I know. They simply imagined *an ideal man* and made him the type of us all. It never occurred to them to try to learn whether this imaginary man really existed. Their theories only required a useful, logical fiction. This fiction became the *norm*, the ideal, about which most modern political and social

theories were spun. When people later found that we are not really like this ideal, they were inclined either to condemn human nature as a whole or fear for the future of civilization.

Perhaps it is not necessary to do either of these things. Perhaps we should find, after more careful study, that human nature is variable in some respects, that basically it is neither good nor bad but partakes in varying degrees of both these qualities, and that with better understanding and control, and only so, may it achieve something.

While most of us have been generalizing and have been repeating certain old dogmas about human nature, scholars have gone to work, gathering slowly through carefully controlled experiments in laboratories and clinics a considerable body of knowledge. Roughly, we may say that the first scientific experimental study of human nature began about 100 years ago with the work of a German scholar named Weber. Since that time innumerable experiments have been made under all sorts of conditions, and these experiments have been subjected to much analysis and discussion, so that at present enough facts have been gathered to give us what is on the whole a very important science.

It is, of course, impossible for the average student to go into a psychological laboratory or clinic. Perhaps that is not necessary if our purpose is to know in general what has been achieved in these places, and what is the meaning for us of these one hundred years of scientific study. In any event, I hope we may make our own the spirit of this new science ; and it is possible that such a view of ourselves will be as subversive to old popular notions as we have found a similar scientific view of the world to be in its revolutionizing effect upon superstitions about nature. To the common-sense observer, the sun goes round the earth in twenty-four hours. Science tells us that in fact the earth goes round the sun once in twelve months, and that the apparent daily circle of the sun is due to the turning of the earth on its axis. Common sense tells us that every species begets its own like ;

yet science tells us that given time enough, species change, and that all our present varied forms of living organisms have a common ancestor. It is possible that science – which is simply good judgment and careful observation applied under conditions that any intelligent person can duplicate and criticize – will cause us to make as great changes in regard to our common-sense ideas about ourselves and about our neighbours as it has caused us to make about our world.

I think it will do so, and that it is already changing all our ideas on social science. We need such knowledge badly. It is inevitable that the scientific spirit, once it began reorganizing our knowledge about the earth, should finally reach and reorganize our knowledge of ourselves. The time has already come, when we can live effectively only when we see ourselves in the light of the knowledge which has done more than anything else to create for us this modern world in which we live.

§ 3

THE IMPORTANCE OF PSYCHOLOGY

We need a *scientific view of human nature*, and I wish to emphasize as strongly as possible what it means to us to have such a view. If we are to live decently, we must adapt ourselves to an environment which is radically different from that of older generations; an environment which has become what it is because men have learned to apply to its control principles of cause and effect. To live in such a world we must learn new habits, new judgments about ourselves and about our neighbours, new ideas of the values of experience and the possibilities of human achievement. We must learn to control human behaviour. We must learn how to make ourselves effective. We can no longer live in this new environment and use the rule-of-thumb methods of control which were possible in a pre-scientific age. Sociologically we

must know if the various tendencies and social movements in which we are asked to participate are conducive to human happiness and effectiveness. We must know what human types these various movements are encouraging. We must know how many of our human traits can be modified by education and how many of them are hereditary and changeless, so that we may spend our energies along the lines where advance is possible. We need some more accurate way of estimating the capacities of ourselves and other people so that we can get the right man into the right place. We need very much such knowledge of human nature as will enable us best to educate the young. Moreover, a most valuable kind of knowledge for each of us would be that which would reveal us to ourselves; which would give us the inner hidden motive of our actions and our professions so that we should not be tricked by our unconscious emotions and impulses; so that our behaviour and our thinking might be relevant to the situations in which we find ourselves; so that we should not waste our energies in ineffective gestures the function of which is often merely to bolster up our unconscious childish egoism. We so commonly deceive ourselves in these respects that it seems to me that if psychology did nothing more than show us the true meaning of our own behaviour, it might lead us to a richer and more beautiful common life.

§ 4

PSYCHOLOGY IS NOT A 'GOSPEL'

I do not wish to promise too much in the name of psychology. Certainly there are very many questions which it cannot answer. It is not a gospel. We should not look to it to give us magic formulæ by which all the problems of life may be miraculously solved. But it is of very great importance that as many persons as possible try to take a scientific view of human nature, and we may at least say that psy-

chology may yet give us a method which with patience and labour will, in time, give us a degree of freedom and mastery over ourselves and over the forces of our environment such as men have never enjoyed. Certainly no one is, or can be free until he is free from within. The educational value of psychology is great. From the time of Socrates until now, it has generally been recognized that the most important aim of knowledge is to 'know thyself.' Education is not merely the accumulation of information. It is the achievement of new mental habits. Psychology ought to help us achieve such habits and to think differently about many things, and as we come to think differently we really become new beings. We shall see that psychology has many branches and covers a wide range of subjects. It has already amassed so much material that probably no one individual can master it all. Certainly, therefore, we cannot in a book like this do more than get a general outline of the science. But we can gain an acquaintance with the significant literature on the subject. We can get a knowledge of psychological methods and of the problems which are most important. And we can learn what it means to think about our human behaviour dispassionately and carefully, and without prejudice.

Much that is called psychology to-day is mis-named. It is neither psychology nor science. Perhaps no word is more abused. There are people going about the country organizing classes or advertising so-called 'self-improvement' courses all in the name of psychology. Many of these self-styled psychologists are merely capitalizing public credulity and are taking advantage of what is often an honest desire to know something about psychology. Students should be warned against the so-called 'psychology' which is nothing but an attempt to justify with half-understood phrases cheap optimism or popular superstitions. They should be on their guard against any book, magazine or lecture, alleged to be psychological, the author of which wallows in sweet phrases or spells such words as 'Mind,' 'Conscious,' 'Sub-Conscious,' 'Truth,'

'The Good,' and so on, with Capital Letters. Psychology has nothing to do with things like phrenology, or spiritualism, or faith-healing, or personal improvement by magic.

Always, when a new science is being developed, many people seize upon an imitation of the real article to gain imagined support for unscientific beliefs. The student should especially be warned against those who confuse psychology with metaphysics; against those who would treat what they call the sub-conscious as a sort of back stairs through which one may sneak up to supermundane and mysterious things. Beware also of those who speak of 'psychic phenomena,' as if psychology were occult and mysterious. Finally let us not confuse psychology with that cult of self-delusion in which half-educated people think that if they can get in tune with the Infinite, showers of blessings, of health, wealth, and social prestige will rain down on their heads.

Human life, all life, for that matter, is, of course, a process which perhaps no science can fathom, and I have no wish to make the claim that we are able to find logical equivalents for the realities of life. But, so far as facts are reducible to a scientific system and can be seen in the light of cause and effect, we should make every effort to organize our knowledge in this way. Whatever great mysteries may exist, there must be *no mysteries in science*. Things are not so just because of some sentimental wish on our part that they be so. The difference between real psychology and the pseudo-science that is advertised in its name is mainly one of intellectual honesty. Science is simply a careful study of facts together with their causes and laws. This is as true of the science of human behaviour, if it is going to be a science at all, as it is of any other science. To modern psychology the human being is a purely natural phenomenon. He has, for purposes of our study, at least, to be regarded as a living organism, different in degree but not in kind from animals. Psychology does not deal with some mysterious entity called 'The Soul' or

'Mind' or 'Consciousness.' It is the science which deals with the ways in which the human animal reacts to the situations of its environment. Hence, psychology is as truly a natural science and aims to keep as strictly to the natural-history point of view as do physiology and biology.

The mind, the soul, the spirit, consciousness, are all very interesting subjects for metaphysical speculation. But as students of psychology, we are not primarily interested in them. We are not even interested in the problem as to how mind is related to the body. This may appear very strange and paradoxical to the beginner. He may say, 'What then is psychology about, if it is not about these things?' I think he will find that there is quite enough for psychology to deal with even without these old metaphysical interests. All these things are merely philosophical assumptions. We must remember that many ancient and medieval thinkers imagined that spirit and body were two distinct things, and that it is largely through popular theological instruction that this old division has survived in the minds of most of us. For purposes of psychological study it is not necessary to cut up human nature in this way. In fact, it is unwise; because those who do this give us a very artificial notion of mankind, and having in thought separated body and spirit are never quite able to get them together again. This way of thinking always suggests to me the story of the Cheshire Cat in *Alice in Wonderland*. You will remember that the cat appears and grins at Alice and then vanishes, leaving the grin behind. Now, of course, if one wishes to view this matter logically, he may say that cat and grin stand for two different 'concepts' and that in order to keep these concepts 'pure' he must not confuse them. Therefore, in pure cat there can be no grin, and in pure grin there can be no cat. Then, having separated the cat and the grin this way, you may, if you choose, wonder how in the world two such beings ever got together. Of course, if you take the grinning cat as a single fact and simply

regard grinning as one of the things which cats in wonderland might do, you might be puzzled at the cat grinning but you are not puzzled over the philosophical problem of reconciling mutually exclusive concepts. If the cat wants to leave the grin behind, let it do so. That is no reason why the philosopher should separate the two. Now, much thinking about human nature in times past has been what I call cat-grin philosophy. Behind this, of course, is a philosophical trick of imagining that the body and its activities belong to two irreconcilable worlds.

Again, when we study a human being we find that in studying his mental life we are always studying, in some way, his behaviour. We shall find that we are really concerned about bodily movements and feelings and various responses to environment. We shall also be studying the problem as to how past experiences modify present behaviour ; and I think we shall see that all human experience comes down to some sort of behaviour, either actual or potential. Some people will doubtless ask, 'Isn't this a very materialistic point of view?' I do not think so. Materialism is a metaphysical theory and is, therefore, as far from our scientific interest as is spiritualism. So far as the psychologist is concerned, the ultimate reality of the whole universe may be either spirit or matter. But our concern is to study human behaviour, and when we have learned how it proceeds, we may if we choose leave psychology behind and study something else.

Perhaps I should say that we are concerned with human behaviour and experience. Personally I can see no objection to adding experience, but experience is often thought of as something passive, mysterious, and subjective. Man is an active being, concerned about relating himself to his world. Perhaps in studying his activity we may be able to learn something also about experience, so far as the latter has scientific significance.

I wish to make this point clear : *Psychology is, or strives to be, a natural science*. The facts which it studies are chiefly

human (sometimes animal) actions or responses to the environment in which living organisms find themselves, and these actions are real events in the natural world, as real as trees, and stones, and oysters. In explaining these facts, we must stay within the order of nature. We should be on our guard against inventing mysterious and occult reasons why things happen. We must try, just as men try in other sciences, to show how one observed fact is related to another. That is, we must assume that human behaviour, or, if you will, mental phenomena, have causes, and that for purposes of our study, at least, these causes should be regarded as the situations and actions which uniformly accompany or precede certain facts of behaviour. This is all we mean by cause – that given a set of circumstances a certain change will uniformly follow if the conditions are the same.

§ 5

IS PSYCHOLOGY YET A TRUE SCIENCE?

Now have we in psychology a science in this sense? It cannot be said that psychology began as a science. Until recent times psychology was a branch of philosophy. Many older philosophers wrote about psychology. They were chiefly concerned about such questions as, 'What is the nature of the soul?' 'What are its attributes?' 'How is it related to the body, and how does it come to possess knowledge?' Indeed, much of the difficulty that people now have in taking a scientific view of psychology dates back to the old philosophical habit of regarding the mind or soul as something distinct from the life process itself and concerned primarily with knowing. It was knowing, not behaving, that concerned the older psychologists, and they thought of knowledge as something outside the process of nature. Thus Aristotle, who defined the soul as the form of a natural body endowed with the capacity for life, thought of the soul as realized in 'perfect knowledge' or in the process

of 'contemplation.' He then proceeded to discuss such subjects as sensation, thought, imagination, reason, ideas, and images. St. Thomas, in the thirteenth century, writes of 'Rationality, the essential form in man.' John Locke, in the seventeenth century, gives us the famous essay concerning human understanding. Locke's psychology is concerned primarily with the origin and nature of ideas. Hume, at the beginning of the eighteenth century, though he also discussed emotions or 'the passions,' is like Locke, chiefly interested in the 'human understanding.' The same may be said of Mill, and in fact of most British and German psychologists down to the time of Herbert Spencer. I should add that the early nineteenth-century German psychologists, Weber and Fechner, who should perhaps be given credit for the beginning of modern experimental psychology, were still occupied with knowledge when they sought to measure what they regarded as sensation units. At the time William James wrote the *Principles of Psychology*, the great problem in this science was still perhaps the question whether the mind consisted of *a knower* who existed outside of and independent of his ideas, or was in some way the sum and substance of the ideas themselves. It was not until the latter part of the nineteenth century, when biology and physiology had achieved definite methods of studying living organisms, that psychology really broke away from philosophy and began to be in the true sense a natural science.

When I say that psychology is now a natural science I mean that it aims at least to take a natural-history point of view of human experience and behaviour. Psychology proposes to study this side of human nature in the same spirit and with as few metaphysical assumptions as would be found in the sciences of physiology and anatomy in their study of the human body. In a word, it would go about its task in almost the same hard-headed way that science studies other natural objects.

While psychology tries to study human nature in the scientific spirit, we should remember that it is a science still in the making, and has many problems yet to solve. It is important that we dwell on this point in order that we may see just how far psychology has succeeded at present in its scientific aim.

§ 6

THE CHARACTERISTICS OF A SCIENCE

What constitutes a science? I should say in general that a study must have achieved three things before we may properly call it a science. Firstly, there must be some agreement as to its *scope;* that is, it must be pretty clearly understood what this particular study is about; what facts should be included in it and what should not. There must be a group of facts or data which are related in some way and which can fairly clearly be marked off for purposes of study ; for instance, the science of anatomy studies the structure of the organism; the science of geology studies deposits in the crust of the earth.

Secondly, there must be a generally accepted *method* of going about the study. This method must be adequate to the task of carefully observing the facts with which the study deals, and it must be a method that any trained student may employ. In other words, facts which are learned by hearsay, which are interpreted by rule of thumb, are not scientific facts. If a man should claim that he got certain information through divine revelation we should perhaps be impertinent if we doubted his word, but we could not say that information so acquired was scientific information, inasmuch as other observers have not been privileged to get their information in this way.

In the third place, the data which have been so marked off and have been studied by an acceptable method, are found to be related in certain ways. There will be discovered

laws or *principles* which govern their inter-relations or changes. These principles are the laws of the science and it is the aim of each science to state its laws in terms that would apply universally to all situations of a certain kind. The more nearly these laws can be stated in quantitative or mathematical formulæ, the more happy scientific students become.

Now, when we turn to psychology we shall, I think, see that in these three important matters there is much disagreement among the students of the science. It probably should be said further that all the biological and social sciences are in very much the same condition, including the science of medicine. *The scope of psychology is hard to determine.* Just where is the line to be drawn between psychology and physiology? We shall later see that these are two different sciences, and yet physiologists and psychologists often trespass on each other's domains. There is a good deal of physiology in such psychological text-books as those of Woodworth, Watson, and James, and there are many sallies into the realm of psychology on the part of well-known physiologists like Cannon, Pavlow and Loeb. Again, psychologists of different schools are frequently accusing one another of mysticism and metaphysics, possibly because the scope of psychology has not been clearly distinguished from that of philosophy. There are men who maintain that psychology is 'the science of the mind' and who would include consciousness within its scope, and there are others who maintain that it is a 'science of behaviour' in a much more strict and limited sense than I have indicated as yet. These are only a few of the differences of opinion as to the scope of the science.

The problem of method is also a moot question on the part of psychologists. There are in fact two or three different methods. Until recently the so-called 'introspective method' obtained, and much psychological experimenting was conducted by the use of this method. The student observed his own differences of sensation, his feelings, his ideas, and so

forth. There has always been some difficulty with this method because obviously the material studied is so subjective that it is difficult to get men to agree as to the facts. I may find that my own experience gives me data which nobody else examining himself would find.

It is, therefore, very difficult for scholars to check one another's work if psychology is limited to this method. Hence efforts are made to render psychology more objective, and some scientists go so far as to say that psychology can be scientific only in so far as its methods are purely objective. In other words, they do not admit that the introspective method is scientific at all. Dr. Watson has attempted to reduce psychology to an observation of the laws of mere stimulus and response. In other words, he would use in the study of human behaviour the same methods as are used in animal psychology. It is obvious that an animal cannot communicate in words his feelings and ideas even if he has them, and so in studying the behaviour of animals, psychologists could make headway only when they could control the animal in such a way that they could find a definite co-ordination between a certain stimulus which was given and the response which was made. In this way consciousness could be left out entirely. The application of this method to human psychology promises a great gain in exactness, even though it probably omits many things which are of psychological interest. A third method is that of psychopathology. This method was developed in the science of medicine and we have heard much about it in the general discussion of psycho-analysis. It deals primarily with abnormal behaviour, but it throws much light on normal reactions to situations.

Finally, there is *the problem of laws* in psychology. In any science the laws are always open to revision as new facts are discovered and new relationships among these facts are noted. The science of psychology is so new that many of its so-called principles are open to revision and restatement,

and perhaps this will always be the case. Psychology deals with individuals, and if we could wholly succeed in reducing the behaviour of an individual to formulæ which would apply alike to all individuals, it is obvious that we should thereby completely ignore that which is distinctly personal in every one. It may be that psychology can go far in giving us laws and principles which apply in a general sort of way as explanations of human behaviour, but that the very nature of its subject-matter is such that it can never be wholly reduced to quantitative formulæ.

There is really more agreement among psychologists than I have indicated in this discussion. I should say that there is fairly general agreement on three points. Nearly all who are scientific at all agree in holding *an evolutionist view* of mental life ; that is, they believe that the psychic nature of man – whatever you choose to call it – lies within the process of the development of animal organisms, and that great as are the mental differences between men and animals, there is, after all, no sudden break anywhere. There used to be much talk about the 'missing link' when the problem of evolution concerned chiefly biologists, but men forget that the 'missing link' is supplied in the life-history of every one of us, if we remember that our life began as a single cell, functioned as a single cell functions, and that through the embryonic and infantile and later stages of development all the intervening forms of life and behaviour have in a telescoped manner been experienced. Again, there is a fairly general agreement that *mental life is chiefly concerned with bodily activity*. We shall see more of this in the next chapter. Finally, nearly all psychologists would agree that the criterion of effective mentality, indeed perhaps the very criterion of truth itself, is to be *found in the facts of adjustment to environment*.

There is much talk to-day about *applied psychology*, and undoubtedly popular interest in this branch of the subject is greatest. Here psychology strives to understand and

explain many things which have escaped general notice, and to use our knowledge of human nature in order that we may predict and control the behaviour of people in definite situations. There is a wide range of circumstances in which applied psychology is coming to be almost a commonplace. It is used, for instance, in industrial matters in determining efficiency, in selecting personnel and in advertising. Again, psychology is applied to education with very interesting results and with a promise for the future which is very encouraging. Under the head of applied psychology we should include the intelligence tests used in the American army during the war and now being used there in many educational institutions as a part of entrance examinations. There has been much debate about these tests, which require a special technique, and have also some very definite sociological implications. We will reserve discussion of all these forms of applied psychology until later.

A moment ago I mentioned psychoanalysis. This is a phase of psychopathology, and we shall see that some of the most important contributions to modern thought are the results of the work of Freud and others in this field. I am inclined to think that psychopathology among other things is going to have a far-reaching effect upon ethics, religion, and many factors of the social problem.

This leads me to say a word about *social psychology*, a separate branch of the science to which this study is in fact an introduction. The literature on this subject is now rather extensive and it is interesting to note that it has all come within the last quarter of the century. Social psychology covers many fields of interest. It has much to say about political science, about economics, criminology, the behaviour of crowds, the forms of normal social adjustment, propaganda, public opinion; in fact, the whole range of the behaviour of people toward their fellows. We may expect in the next few years a very rapid reorganization of most of our knowledge in this field, as social psychology

throws its light upon human relationships which were hitherto interpreted by tradition and dogma.

Finally, I should perhaps add that while our science has now practically come out from under the sovereignty of philosophy, it is having in turn a marked influence upon its former lord and master. As we are all seeking a working philosophy of life which will help us better to relate ourselves to reality, this point is important. We shall have occasion as we go on, to show how modern psychology is influencing *our thinking about thinking*, and therefore about the meaning of truth and many of the basic values and ideals of life. The old intellectualist or rationalistic philosophy was itself largely the result of ignorance about psychology. That older philosophy is now passing away under the criticism of scientific psychology, and as it passes, many sociological and other fictions about human nature also recede into the distance. Intellect is no longer seen to be a mere receiving instrument tuned in on an ethereal broad-casting station to pick up eternal truths; it is in a very real sense a creative thing. The meanings which it gives to life are not mere 'stereotyped copies of a de luxe edition' of realities and principles which exist in the unseen; they are real human achievements. In a sense psychology shows us that intellect and all its works are instruments by means of which man is coming to control the forces that play upon his life. With a better knowledge of human nature, it is our hope that he may yet learn how best to govern his own behaviour, and to work toward a happier, more tolerant and better-ordered world.

CHAPTER TWO

PSYCHOLOGY AND PHYSIOLOGY

A Study of Reactions

§ 1

If we are to understand modern psychology we must stop thinking about mind as if it were some *invisible thing*, distinct from the body. I do not mean that we should think of mind, after the fashion of certain early materialists, as a *product* of the body, for a product also is a thing and we should not think of mind as a *thing* at all. *Mental life is a process.* Perhaps at present we do not even need to use the words 'mental life.' All life is a process, and what we call mental life is part of that process. As Spencer said, 'Life is the adjustment of inner to outer relations.' James said that this is also a good statement of what mental life is. You cannot imagine an idea, or a purpose, or an act of human volition that is not in some way, either directly or indirectly, part of a process of adjustment of the living organism to its environment.

It is characteristic of organisms that they respond in certain ways to the situations about them. Very simple organisms respond in very simple ways and more complex organisms respond in ways that are more complex. Man, the most highly organized of all living things, seems at times to respond to objects in ways that can only be explained if we take the possibility of his *foreknowledge* of the results of his behaviour into account. This kind of behaviour we call intelligent. While there is a marked difference between intelligent and purely automatic activity, yet we may say that in the study of intelligence, psychology is concerned with the responses that living things make to their environment.

What is it that responds? We do not now need to assume some invisible spiritual being. There may or may not be such a being hidden in the organism. That is a matter for the philosophers to talk about. Psychology is concerned with the

behaviour of the organism. If you are interested in the *structure* of living beings, that is, if you study the body, your interest is in anatomy or biology. If you are interested in the *action* of these beings, you are concerned with psychology. Perhaps it is too crude to say that mind is the way the body behaves. But, at any rate, such a statement would come nearer the truth than the assumption that the mind and the body are two separate beings or distinct streams of events. It would be incorrect to say in general that psychology is the science of the behaviour of organisms. For physiology is also concerned only with certain kinds of behaviour.

The line between physiology and psychology is not always clear. Yet the two are separate sciences. They often deal with the same facts of bodily function, but they deal with them from very different standpoints. For instance, the function of breathing or of the beating of the heart are certainly bodily activities the study of which belongs to physiology. But the breathing and the activity of the heart may be greatly modified when a person or an animal is excited, and then it may be said that these bodily functions have something to do with psychology. Perhaps it would be best to say that physiology is concerned with bodily changes in so far as they are the functions of separate organs, and that psychology is concerned with those changes when they have the function of relating the *organism as a whole* to its environment.

Many people hold that psychology is concerned with these activities only when they are accompanied by *consciousness*. But psychologists are not agreed upon this point, and as there is much debate over the question whether consciousness makes any difference, we had better wait and discuss this point later. Many scholars have blurred the distinction between these two sciences. But relatively speaking, the difference is well recognized. For instance, I sit at my desk writing this book. A physiologist would be interested in describing the contraction of the muscles in my arm and

fingers; he might tell me how these movements are related to other bodily organs and their functions, as for instance, digestion, respiration, and so forth. Furthermore, he might perhaps tell me that I could think more clearly if I sat up straighter. But he would not *as a physiologist* be concerned about the reason why I am writing *this particular book* and not some other, and he would not be a physiologist in the strict sense if he began to discuss the relation between my habit of writing books and my behaviour as a whole or that of other people. These last are questions of psychological interest.

The point which I wish to make clear is that psychology is concerned with behaviour, and that the behaviour which has psychological interest grows out of and is, in a sense, continuous with those functions which we call physiological. Water at a certain temperature begins to boil. We may regard the boiling as a way in which water sometimes acts and we may ask ourselves under what conditions it boils? Of course, we do not talk about the 'psychology' of the water, but neither do we think of boiling as a mysterious and invisible thing which comes along and miraculously attaches itself to the water. All we need to say is that boiling is a process, a kind of activity of water under certain conditions. So psychologists might say that what we call mental life is a kind of activity which characterizes the life process of certain living organisms.

William James, in the *Principles of Psychology*, says, 'On the whole, few recent formulas have done more real service of a rough sort in psychology than the Spencerian one that the essence of mental life and bodily life are one, namely, "the adjustment of inner to outer relations." Such a formula is vagueness incarnate; but because it takes into account the fact that minds inhabit environments which act on them and on which they in turn react, because, in short, it takes mind in the midst of all its concrete relations, it is immensely more fertile than the old-fashioned "rational psychology,"

which treated the soul as a detached existent, sufficient unto itself, and assumed to consider only its nature and properties. I shall therefore feel free to make any sallies into zoology or into pure nerve-physiology which may seem instructive for our purposes, but otherwise shall leave those sciences to the physiologists.'

He elsewhere tells us that the stream of stimulation which runs in at our eyes and ears and other sense organs must, if complete, run out again in various bodily movements. This way of putting the case might lead one to think that there are two streams, one which comes through our eyes and ears and so forth, and another which consists of our ordinary bodily functions. We shall see later that nothing enters in at our eyes, ears, etc., except our own nerve currents, certain changes within nerve-tissues when the nerve ends are irritated by objects to which they are sensitive. There is no reason for assuming that these nerve currents, whatever they consist of, are not part of our whole life process; so we do not need to assume two streams of activity. It is important to note that James here insists that what we call mental life begins and ends in *bodily sensitiveness and movements*. We think in order to act, or better still, thinking is a part of acting.

§ 2

THE BEHAVIOUR OF THE SINGLE LIVING CELL

Now let us try to get a picture of the kind of organic behaviour in which psychology is interested, and let us see if we are correct in assuming it to be a purely *natural phenomenon*. Let us begin by asking what the simplest living thing does, and let us see if there is any real continuity between such behaviour and that of highly evolved beings like ourselves. If we find that all behaviour is made up of the same elements we shall have discovered a very important fact about human nature.

Some writers, in describing the facts which we are about to discuss, would say that they were giving 'the physical basis of mental life.' I think this is a misleading way of putting it. For we have already said that the physical and the mental are but two views of the behaviour of living organisms. Since the life process of every living thing begins with a single cell, let us imagine that we are looking through a microscope at a living being which consists of just one cell or tiny globule of living matter, a *protozoan*, say an *amœba*. We should see that this cell consisted of a nucleus and a surrounding layer of living tissue or protoplasm. The very fact that this cell is alive means that it is doing something. Within it very complicated changes are going on: nutrition, decomposition, growth. If the cell were watched long enough under the right conditions, it might be seen to divide into two cells each of which would be just like the original one. This is the manner in which the amœba reproduces itself.

Moreover, we should see that this little creature can move about. It first pushes out a tiny extension of soft tissue, and then draws the bulk of its body into the extended portion. In this way we might say that it *flows* along, but its flowing is not like the flowing of a drop of water which moves in the line of motion determined merely by the force of gravity. The amœba can move up hill or in any direction as it is stimulated. Other so-called unicellular organisms move by different methods, some having one or more long spines, or hair-like threads, attached to the cell-body by means of which movement is achieved. The sperm cells of animals move in this way.

If the amœba is irritated by a pointed instrument it will *contract*. If it is in the presence of nourishment it may *expand* and fold itself about the particle of food and thus absorb it. Some one-celled beings are particularly sensitive to light; others to certain chemical substances or electrical currents. Professor Jacques Loeb calls these latter move-

ments 'tropisms.' He says that they are caused by the fact that the living substance has a peculiar *chemical constitution* which is attracted or repelled by chemical activity in much the same way as chlorophyl, the substance in the green leaves of plants, causes their leaves to respond in certain ways to light. Loeb believed that these original movements of living beings or *tropisms* are purely mechanical in their origin and nature, and are so determined by conditions that it might be possible to describe all the movements of all living beings in terms of the same kind of mathematical formula that a physicist might use to describe the laws of gravity. Thus he thought that in psychology we are merely dealing with these original 'tropisms.' We are greatly indebted to Professor Loeb for our knowledge of tropisms, but whether they explain as much as he seemed to think they do, is a matter which has not yet been proved to everybody's satisfaction.

Now let us notice what we have said about the behaviour of the living cell. It does many things. In fact, in a rudimentary fashion, it does all that any higher animal can do. It performs functions of nutrition, reaction to irritating stimuli, reproduction, and movement in space. Why it should do all these things is a problem which we cannot now solve. Perhaps we never can; for we are asking *why life exists at all.* Even if we should say that these functions are the result of physical and chemical causes, acting in a strictly mechanical way, we would then only be saying that in the simplest cases, and under certain laboratory conditions, it is possible to predict with mathematical accuracy what movements will occur. Whether we have then said all there is to say about such movements; and whether the activities of more complex beings, even assuming that they are made up of these more simple functions, *add anything* when such simple movements are combined in new ways – these are questions which a chemical and mechanical interpretation of life would necessarily leave unanswered for us.

Many students think that the simple elements of what in

more complex organisms become the varied forms of animal behaviour (including consciousness) are properties of matter itself. Perhaps it is a poetical view of things to suggest, as Lloyd Morgan did, that all matter contains a *sub-psychic* quality. But a botanist of some reputation has recently written two popular articles; one on the mind of plants, and another on the mind of the molecule. Our problem is difficult enough without trying to psychoanalyse molecules. So let us be content to say that the elementary forms of behaviour are to be found in all living beings, and that in the more highly organized ones these elementary movements are combined in very complex ways, so that results are achieved which, of course, are unthinkable when we contemplate only the simple forms of life.

Now let us see how the same elements of behaviour constitute the activity of the higher forms of life. A moment ago I spoke of the fact that the amœba reproduces itself simply by dividing into two cells. This process of *cell division* is a very important fact. It is a form of behaviour which creates what a little while ago we saw certain writers are wont to call 'the physical basis of mental life.' If we are willing to speak of mental life as behaviour, it is quite possible then to reverse the logic of the phrase quoted above and to speak of the *psychical basis of the physical structure*, inasmuch as every living body is the result of a process of growth and this process of growth is a way in which the cells which constitute the body behave. When amœba divide, two new cells are created which live for a time an independent existence. If we consider living things which are a little higher in the scale of complexity, we find that this process of spontaneous cell division seems to run down, in time, and that after a certain number of divisions no new cells are produced. The process has to be started up again by the union of these independent cells with other cells of the same species.

Very early in the evolution of life two kinds of cell-produc-

ing organisms appear, each carrying its own modification of the germ plasm of the species: the *ova* or female cells and the *sperm* or male cells. Each of these types of cells may go on dividing just like the amœba during the life of the organism which bears them, but they will produce a new organism only when the ovum is united with the sperm cell. This is true of both plants and animals and is, if you stop to think about it and study all the facts, a very complicated form of behaviour. A higher organism is created by the process of cell-division similar to that which we saw in the amœba. The impregnated ovum in producing the new animal embryo at once begins to divide. As it does so the cells divide *in two ways*: one process of cell-division goes on reproducing the parent-cell, and these cells, which are similar to the original one, become the *germplasm*, the function of which is, in mature life, to unite with the germ cell of the opposite sex and reproduce the species. The other process of cell-division creates different kinds of cells and arranges them in four layers which combine to produce the embryo. Thus in the embryo a structure is gradually built up as the cells divide. But the cells which are combined to make up the animal body no longer perform all the life-functions as do the cells of the original protozoa; certain cells go to make up the motor organs of the body, others the digestive organs, the nervous system, and so forth.

The function of conducting to the motor tissue (muscles and glands) the stimuli or irritations that play upon the organism, and of responding to these stimuli, is performed by the *nerve-cells*. These nerve-cells are called *neurones*. A neurone is a living cell with a nucleus and its surrounding protoplasm, very much like an amœba, only in the neurone the surrounding tissue is greatly modified as to shape. It is, as it were, divided into long branching threads. Perhaps we can get a picture of the nerve-cell of a higher organism if we imagine it as a microscopic tree. The nucleus is in the trunk; the roots are few in number (often only one) which extend

like a *tap-root* to a very great length, sometimes several feet. This extension or tap-root is called the 'axone,' and its function is to conduct a stimulus away from the central body or the trunk. On the other side of the trunk there is a number of branches which resemble the limbs and the twigs of a tree. These bush fibres are called dendrites, and their function is to conduct stimuli toward the central body or trunk. The neurones with their axones and dendrites are very numerous. There are millions of them in the human body and they are arranged into a system of intricate connections called *the nervous system*. The ends of the axones and dendrites are like brushes, and they fit into the structure of a sense organ or 'receptor' in the skin, muscle, eyes, ears, and so forth, or the brush on the end of an axone will fit to the brush on the end of the dendrite of some other nerve-cell and thus form a connection between two cells. The point where these brush ends of different neurones meet is called a *synapse*. It is through these synapses that nerve currents pass.

When a current of stimulation passing in through the dendrite to a cell body, out along an axone, goes through the synapse to the dendrites of some connecting nerve-cell and thence through its cell body, and out along one of its axones to a muscle fibre, causing that fibre to contract, we call that connection between the sense organ and the muscle fibre a *reflex arc*. Note that this is the same phenomenon of behaviour, only much more complex, that we saw in the amœba as it contracted when irritated by a sharp instrument. This reflex arc is important because it is that which connects the stimulus with the organ of response and is the *elemental fact of our whole psychic life or behaviour*. This is the basis of all our reactions, and in a very real sense our whole mental life may be said to consist of reactions to stimuli. . . . We will take up this matter a little later. Let us return for a moment to the nervous system.

§ 3

THE NERVOUS SYSTEM

It is impossible for us in this book to enter into a detailed discussion of the anatomy of the nervous system in man. Various text-books in psychology give some space to this subject. Those who are interested I advise to consult James's *Principles of Psychology*, Chapter II; Woodworth's *Psychology*, Chapter II; Watson's *Behaviourism*, Chapters III and IV. Here I merely wish to call attention to the fact that while in many lower forms of life the nervous system consists merely of *ganglia*, or clusters of nerve-cells, more or less loosely connected, in vertebrates, especially in men, the neurones with their axones and dendrites are arranged in a definite formation which, while it shows various stages of evolution from fishes to man, attains a high degree of structural organization. As Herbert Spencer would say, 'with this structural complexity there goes a similar *functional complexity*.'

Many writers have compared the human nervous system to a telephone system, with the exchange in the higher co-ordinating centres, notably the brain, and with myriads of nerve fibres running in and out, most of them through the great cable or spinal cord. So complex are the connections here that almost any stimulus can be connected with any motor organ and at various levels. There are simple reflex arcs organized in the lower centres of the spinal cord, and there are higher organizations of reflexes, which not only may bring the entire organism into action, but may bring the action itself into definite relation with past experience and with foreseen future results.

For our present purpose let us look at man's nervous organization as made up of two systems, the *cerebro-spinal* system and the *sympathetic* system. We cannot dwell at length upon the anatomical structure or arrangement of these two

systems, assuming that all those who have had an elementary school course in anatomy will be able to remember the facts in general. We are chiefly concerned with their functions, and these I shall state briefly. The statement must necessarily be rather crude; but it will, I trust, make clear the important aspects of the subject.

The *cerebro-spinal* system consists of the brain, spinal cord, and nerve dendrites and axones, which lead out to sense organs, to the various muscles, and to the synapses which govern the glandular secretions and the action of certain 'unstriped' muscles, of which we will speak later. The function of this nervous system is primarily to enable the organism to make such movements as will relate it to its environment. It thus serves to connect the stimuli which are picked up by the sense organs with the organs which produce appropriate movements. It is thus essentially a mechanism of *motor* significance. The brain and spinal cord consist of white tissue and grey matter. The white tissue is made up of dendrites and axone fibres which conduct impulses toward or away from the nuclei of nerve cells. The grey matter consists probably of the nuclei and of the synapses to which I have referred. In the spinal cord a cross-section would show that the white or connecting fibres are on the outside and the grey matter is at the centre, arranged somewhat in the shape of a St. Andrew's cross. In the brain, notably the cerebrum, the highest co-ordination organization, the white fibre is underneath and the grey matter is on the 'convoluted' or deeply folded surface. This grey surface is called the *cerebral cortex*. Psychologists say that this is where the various sensory currents are associated with the appropriate motor nerves, although it must be remembered that many reflex arcs are organized in the spinal cord or the lower centres of the brain. It would seem that the higher centres are brought into the various reflex arcs in order to relate the organism as a whole to the objects about it, and that the lower centres produce what would be called *specific*

responses or single movements, which are organized rather automatically.

Experiments on animals would show that a frog, for instance, whose cerebral hemisphere had been disconnected, would appear somewhat weakened in its response, would lack the initiative which an ordinary frog would show in getting itself out of difficulties. But, otherwise, to the casual observer, it would appear very much like a normal frog. If some of the lower brain centres are also removed the frog no longer responds to stimuli such as the presence of food, and its movements are jerky and appear to be mechanical or forced. The frog can still swallow and croak and turn over, and its circulation and respiration are apparently not greatly impaired. If all the brain is removed and nothing is left but the spinal cord, respiration ceases and the frog will not move about. It lies rather flat. But it will still respond to tactile stimuli, the limbs even moving more quickly than in a normal animal. Thus, we see that if we begin with the lower centres, the simplest reflex arcs would produce mere jerky movements and that the higher centres, when connected into these arcs, would have the function of enabling the animal to act as a whole.

The *sympathetic system* consists of certain ganglia or groups of nerves, scattered in the vital organs of the body, and thus outside the cerebro-spinal system. These nerves do not connect with any sense organs, but receive their stimulus through synapses which connect them with the nerves running from the cerebro-spinal system. The sympathetic nervous system is said to control the contraction and relaxation of the 'unstriped' muscle tissue, notably that of the muscles in the arteries and heart, the alimentary canal, sex organs, sweat glands, and so forth. It also stimulates the secretions of the various *glands* which are located in the body, and these secretions, when they are poured into the blood stream, produce effects which we shall see later have something to do with the emotions. Much has recently been said

about the functions of the autonomic or sympathetic system, and particularly about the influence upon personality of the secretion of the ductless or *endocrine* glands. For instance, the thyroid. We cannot pause here to enter upon a discussion of this very important matter. When we come to the consideration of the emotions we shall have more to say about it. The student who is interested in it is advised to read Chapter 14 of Professor Cannon's book, *Bodily Changes, in Pain and Hunger, Rage and Fear.*

§ 4

REFLEX ACTION

I wish now to say something about the *reflex* or nervous current which passes through this complicated structure, producing movements which are appropriate to certain stimuli. This is a very wonderful phenomenon, but so is all nature wonderful. It is wonderful that evolution should ever have developed an organism, wherein an irritation to one part of the body can be so connected with a distant organ in another part of the body, that movements will take place which will bring the entire organism into such relations with the objects about it that it may use these objects for its own welfare. It is even more wonderful that at certain times the organism may become aware of what is happening and that this awareness may further aid it in adapting itself to situations that do not yet exist, but the causal connections to which it can foresee. If we are going to be scientific, we must try to see if there are any relations among these marvels which we can understand. I think there are.

Much has been said by psychologists about *reflex actions.* Perhaps the simplest reflex is seen in the one-celled amœba. But Woodworth shows that relatively few *simple* reflexes occur in humans. The winking of the eye when anything touches the eye-ball is a good example. Such reflexes take place in about one-twentieth of a second. The narrow-

ing of the pupils of the eyes in a strong light, the knee-jerk when the tendon just below the knee-joint is struck, are other examples, and there are others not quite so simple, such as coughing, sneezing, etc., and the apparently spontaneous jerking of the muscles when the body is irritated in certain ways. We have already seen that the connection between the sense organ and the muscle fibre is called the *reflex arc*. This arc consists of the linking of certain neurons so that there is an incoming, or *afferent* current, an *association* of centres consisting of one or more synapses, and an *efferent* current which conducts the motor impulse to the muscle fibre of some organ of movement. Behaviour in the simplest terms consists of the contraction and relaxation of muscle fibres, though, of course, we should not arrive at a satisfactory account of behaviour if we were merely to describe these muscular movements. We should have to know to what situations they were responding, whether the response was effective in dealing with the situation, how it was modified by past experience, and finally, by what methods it could be controlled or improved.

When we look at the bodily movements of an organism we can see that they are, in the main, of two kinds: *random* movements which do not bring the organism into any effective relations with outside things, and *co-ordinated* movements in which the organism stimulated does something toward the object which stimulates it. Dr. W. H. R. Rivers, the English psychologist, saw in these two kinds of reaction the basis of a much wider distinction. This writer, in co-operation with Dr. Head, performed an interesting experiment. The nerves in Dr. Head's arm were cut in such a way that no stimulus was received. During the slow process of healing, the time came when there was a response of a certain sort. Dr. Head's hand was irritated, but he could not tell just where the irritation occurred. There was a general feeling of discomfort, and a general and unadaptive movement. Briefly we may say that this sort of response to

stimulus he called the *protopathic*. He maintained that in the process of evolution this was the earliest form of behaviour, and inasmuch as emotion and some instinctive activity seem to retain this kind of response, he held that it is a basic factor even among higher organisms, though it is now, for the most part, *repressed;* that is, it goes on more or less unconsciously under normal conditions and often exists only in an incipient manner. The protopathic response is characterized by two facts. First, it is usually on the *all-or-none* principle. That is, protopathic action, if set going at all, generally stimulates the motor organs to their full capacity, thus such action is not graded to the amount of the stimulus. Most emotional and instinctive behaviour show this all-or-none tendency. Second, protopathic response is largely what Dr. Rivers calls '*mass reaction*.' One sees an excellent example of this in the tendency of a worm to 'squirm' with its *whole body* when irritated. These movements are random movements. That is, they are outlets of energy, but they do not adapt the organism to anything. Dr. Rivers found that in the war when soldiers received certain injuries in the cerebro-spinal system they made movements of this sort. In fact, we are all familiar with such movements in persons who are suffering great excitement or severe pain. Much emotional activity is of this type and is protopathic.

The complete healing of the severed nerves in the Rivers-Head experiment restored normal response, and when this normal response came back, the protopathic form of response disappeared; that is, it was repressed because there was superimposed upon it a more adequate kind of behaviour which we may call the *specific response*. The specific response is movement which is *directly adapted* to a situation. Dr. Rivers calls this kind of response the '*epicritic*.'

This latter kind of reaction does not, under normal conditions of life, consist of one specific reflex, but as Watson has shown, random movements become, through various pro-

cesses of learning in early childhood, and later, *co-ordinated* into movements that are of use to the organism. This co-ordination of reflex actions has been given the name of '*conditioned reflexes*.' We shall find that much is said about conditioned reflexes. The best known experiments with this phenomenon were conducted by the Russian physiologist, Pawlov. Pawlov's dogs are famous in psychology. His experiment, in substance, is as follows: A hungry dog is shown food and the sight of this food stimulates the flow of saliva. When the food is shown the dog, a bell is rung, and after repeating this for a long time, Pawlov found that the dog's saliva glands will be stimulated into activity if the bell is rung even when there is no food visible. Thus, by association, a reflex which is set going by a stimulus is now connected with something that normally would not have produced the reflex action at all. This transfer of stimuli is what is meant by the conditioned reflex, and Watson and others have shown that a similar conditioning of reflexes can be set up in human beings.

As I said, the working of the nervous system has often been likened to that of a complicated telephone exchange. While this is in some ways a good analogy, in other respects it is inadequate. We do not know how a message from a sense organ is translated into the appropriate bodily movement. Probably the conditioned reflex explains how this occurs. But even this cannot wholly explain it, because the synapses between the neurones are not equally receptive at all times to nerve currents. When they are carrying one impulse they seem to be closed to any other. Some psychologists think that a *selective process* is going on in the organism. Again, there often seems to be more response than is indicated by the stimulus. For instance, if you pay very close attention to what you really see and hear, you will notice that you do not see and hear as much as you think you do or as much as you act upon. A few rumbling sounds indicate the approach of a motor-car or a tram-car and you act upon the stimulus

far in excess of what you hear, you construct at once the tram-car or motor-car *as a whole*. In fact, you have inferred from your past experience most of what you thought you heard.

Whether consciousness is necessary to explain human behaviour; whether behaviour can be explained mechanically; whether an individual really has alternative modes of response to certain situations; or whether, given the same physical conditions, one must always behave in the same way; all these are problems which are not settled, and we shall see later how important is the difference of opinion concerning these questions.

Now we are concerned about the relation of the physiological to the psychological. For our purposes we must not think that these two sciences are occupied with two separate and distinct kinds of existence. Scientifically regarded, the organism is one. However we may think of mental life, we should recognize the fact that it cannot be separated from physical processes. William James says in *Principles of Psychology* that 'no mental modification ever occurs that is not accompanied or followed by a bodily change.' He also points to the effects, on what we call mental life, of fever, exhaustion, hypnotism, old age, and the like.

There is some discussion as to what it is that passes over the nerve tissue when it is stimulated. In other words, what does a nerve current consist of? It is generally said that some sort of *chemical change* occurs, but we do not know just what this change is. It may be that this change, whether chemical or not, is enough to account for behaviour. On the other hand, it may be that the change is not identical with the current itself, but is the *result* of the current having passed through the nerve fibres. Undoubtedly some sort of force or energy is liberated, but we should be careful about the use of the term energy in connection with mental life. In the first place, no energy really enters the body through the sense organs. Light waves striking upon the eyes do not enter into the brain, nor does the impact of objects striking upon the

surface of the body continue as a shock or a jar in the stimulus which is carried over the nerves. What we always get is a *stimulus;* in other words, the object which excites us simply irritates us to *activity which is our own*. When we look at things we are not carrying pictures or images of them into our brain; the pictures or images which we see are the result of the activity of our eyes and our optic nerves.

Again, the idea of energy has value for science only because it enables the scientist to describe the changes in position of particles of matter in mathematical or *quantitative terms*. Apart from lending itself to mathematical description, the word energy has little or no meaning. What the mysterious force is in itself we do not know. Bergson seems to argue that there is a definite sort of 'mind energy' which he apparently distinguishes from bodily energy. But this is really a poetic way of talking about the mind, and is, I think, an unfortunate way, because it leads people to believe that thoughts are a kind of force or energy. They are not. They are not properly describable in terms of energy at all. Professor Loeb and others hold the view that mental life can be explained in strictly mechanical terms. They do not maintain that they can explain it *now*, but they have the theory that we *could* explain it this way if we only knew enough about it. This is the *mechanistic theory*, and I am against assuming any such theory in advance of fuller knowledge.

Moreover, as McDougall warns us, we should beware of interpreting human conduct in such a way as to make it appear that it is determined wholly by the mechanics of the brain. We know very little about the mechanics of the brain, and there may be much human behaviour which is not explicable in terms of brain activity. There may be differences of character and habit which are very great, and yet the mechanical difference in brain activity may be very small. In other words, while, as I have tried to show, body and mind really correspond to two views of the activity of the same organism, yet, in a very real sense, mental life and strictly

bodily function may be incommensurable. Let me illustrate what I mean, for I am not here suggesting anything mystical or occult.

A motor is passing along the street at a certain speed and it cannot be denied that the movement of the car is determined mechanically. It is possible to give a complete account of how it moves, and do it in strictly mechanical terms. There is a quantitative relation between the explosive force of the petrol, the pressure in the cylinders, the size and speed of rotation of the wheels, the weight of the car, and the loss of motion due to friction, etc. All this may be calculated very nicely and correctly.

But such calculation does not explain why the motor-car is going in one direction and not in another, nor does it tell us why the car is passing at this particular time. In other words, how the passing of the car is related to *larger combinations of moving objects*. The passing car may be carrying a doctor who has been called in some emergency; it may be carrying a bride on the way to her wedding, or a band of boot-leggers or a party of police; or a diplomat rushing to a meeting of great international importance. Now, in any of these diverse activities the car may be playing a very necessary and important part; so much so that if it should break down the behaviour of certain people would always thereafter be different. So in explaining the fact that the car is passing we must not only give the principle that causes movement in general, but we must relate this movement to the pattern of some larger situation in which it plays a part.

The same thing is true with human behaviour. In truth, our mental life can be reduced to the simple elements of bodily movement, and we do not need to invent any mystery, other than that which exists in the movements of all objects, to explain these movements. You may say that they are mechanically caused. But, just as in explaining the movement of the car, if we want an adequate understanding of what a person is doing at any time, we must also see his

activity in relation to some situation in which it occurs. Psychology is concerned with the *integration of human movements in situations*. It studies human activity in the light of the connections and inter-relations of one act with another, for our actions fall into various series and patterns, and you might say, causal systems. To explain an act adequately we must explain it in the light of the *situation as a whole;* or, in other words, we must show its causal relations not merely to bodily movements but to *other facts of behaviour*. If we ignore the situations as a whole we leave unexplained everything except the mere fact that activity is going on. Psychology must find the significance of human action not in purely physiological causes, but in the inter-relations of the facts of behaviour themselves. We cannot ignore that action which is the result of some past experience, or the action which is directed toward some end. So the situation as a whole to which one is at a given time responding may involve future events as well as past ones. Probably psychology is the only science which has to deal with causes of this nature.

CHAPTER THREE

PSYCHOLOGY AND PHILOSOPHY

The Place of William James

§ 1

THE significance of William James's work in psychology is so great that it is impossible for any one to gain an insight into modern psychology unless he has, for at least once in his life, seen this subject from William James's point of view. Psychology was not an isolated thing to James. I mean to say that the student in sharing James's point of view not only gains a new insight into the subject matter of psychology, but he gains something more valuable: a different point of view in his thinking about most of the problems of our life. There are some writers whom to know is to live through an experience which alters one's outlook for ever after. These are the great writers, and James was a great writer and scholar.

Many of the questions that James dealt with are still so controversial that we shall find ourselves referring to him again and again as we discuss the various problems of this science. In fact, James's work is still the classic text on the subject, and it is therefore highly important that we see just what it is that he did for our science. In a sense, we shall have to take a very broad view of James. He was not only a psychologist but he was also a philosopher, and a great one.

In the first chapter, I said that psychology, having emancipated itself from the older philosophy, is in turn having a very great effect upon its former lord and master. In fact, there has occurred in our own time the profoundest revolution in philosophical thinking since Plato. I suggested something of the nature of this change at the close of the first chapter, when I said that mind is no longer regarded as a passive thing, receiving impressions and copying eternal principles, but that mind is a creative thing, the primary function of which is to relate the human organism to the

environment. As Professor Dewey says, we owe much of this reconstruction in philosophy to the newer psychology. In other words, we owe very much of it indeed to William James, who not only did much to work out the principles of this newer psychology, but has done more than anyone else to show their application to and their far-reaching changes in the whole body of human thought.

§ 2

EARLY INFLUENCES

James was born in 1842 in New York City, and was brought up as a boy in the house at Number 2, Washington Place. There are two interesting facts about his early environment which later influenced his mental development. In the first place, his father was a man of books, who combined the career of a literary man with that of a philosopher; one who shared to the full the intellectual movements current in his day, and was the friend of such men as Emerson and Thackeray. It was in this environment that James spent his boyhood years. The intellectual life was not an extraneous thing to him, but was almost identical with the adventure of living itself. It is this spirit of adventure which we always meet in James. Thinking was never for him the dead and formal thing that it is for most people.

Secondly, James's father was a pronounced religious liberal. In his early years he had been a theological student at Princeton University, but, sharing the intellectual revolt of the early nineteenth century, yet retaining his religious interests, Henry James, Senior, held the most unconventional views about religion and life. A story is told of him which illustrates the type of man he was. Shortly before his death his daughter was compelled to speak to him about what he would like to have done at his funeral. He was very much interested, apparently not having thought of it before. He

reflected for some time, and then said with the greatest solemnity, 'Tell him to say this: "Here lies a man who has thought all his life that the ceremonies attending birth, marriage, and death were all damned nonsense." Don't let him say a word more.' Something of this spirit of independence, of this dislike of the formal and the conventional, we see in the work of William James. Perhaps there is a real inheritance of temperament. At any rate, James was the most intensely human of our classic thinkers. As he used to say, his aim was to get away from pedantry and dusty-mindedness. As a young man, James studied medicine in Europe and came in contact with the great minds of his time. When he returned to Harvard University to teach psychology, he came with a new point of view, combining as he did the background of the knowledge of medicine with the spirit of the German laboratory of experimental psychology.

It is often said that James gives us a psychology without the soul. The critics of the modern psychological movement have their little joke about the science. They say that psychology first lost its Soul; then it lost its Mind; finally, it lost its Consciousness. This is only a way of saying that as psychology becomes more and more a true science, it necessarily must reject those metaphysical assumptions which it had inherited from the older philosophers, and take its stand squarely upon the facts of human experience.

James did much to drive metaphysics out of psychology. Briefly we may say that metaphysics is the speculation about the 'ultimate nature' of reality, or that which *lies behind* the things we see and touch and deal with. For instance, metaphysics is concerned with 'Substance.' The English philosopher, Berkeley, long ago showed that 'substance' is only a word by which we mean that a certain number of qualities or characteristics are found together in a body. Substance as an unseen, mysterious thing we do not any longer believe in. Now, as many older thinkers believed in a mysterious *material substance* which lay behind the facts which we can

experience, so they also believed in a mysterious *spiritual substance*, Soul or Mind, which likewise lay behind the facts of mental life and gave them unity. It was felt that this mysterious Soul had certain *faculties* such as memory, imagination, reason, and that these faculties somehow took hold of the sensations which we receive from the outside world and worked them up into some kind of order. This belief survives to some extent even now in popular psychology, but since James it is no longer held to be scientific.

§ 3

PSYCHOLOGY BEFORE JAMES

Before James the great subject of debate among psychologists was the question of *spiritualism* versus *associationism*, which we will now discuss in turn. By spiritualism I do not mean a belief in spirits and seances and mediums, but rather the older philosophical doctrine about which I have just spoken, the doctrine of the Soul with its faculties. Of this view James says, 'Why should this absolute God-given faculty, say memory, retain so much better the events of yesterday than those of last year and – why should illness and exhaustion enfeeble it; why should drugs, fever, asphyxia and excitement resuscitate things long since forgotten? If we content ourselves merely with affirming that the faculty of memory is so peculiarly constituted by nature as to exhibit just these oddities, we seem little better for having invoked it, for our explanation becomes as complicated as the facts with which we started. Evidently, then, the faculty does not exist absolutely, but works under conditions – something must always precede and remind it of whatever we are to recollect.' 'In fact,' says James, 'we must become cerebralists and know the general law that no mental modification ever occurs which is not accompanied or followed by a bodily change.' 'The bare existence of a past fact is no

ground for our remembering it. Unless we have sensed it, or somehow undergone it, we shall never know of its having been. Experiences of the body are thus one of the conditions of the faculty of memory being what it is.' James here singles out memory merely for the purpose of discussion. The same would hold of any other 'faculty' of this metaphysical soul. In a word, James's psychology explains mental phenomena without having resort to the doctrine of the soul.

The second psychological theory which existed before James was called Associationism. This school of thought which, among British thinkers, derived chiefly from Locke and Hume, holds that the mind is a kind of *product* or a *compound* made up of small bits of experience. There is no soul or '*knower*' behind the sensations and ideas that one has, but rather the sensations which come to us as very small bits of knowledge are supposed to *sum themselves up* into ideas. And the ideas finally sum themselves up into a sense of self or ego. James raises the question – 'this multitude of ideas, existing absolutely, yet clinging together and weaving an endless carpet of themselves like dominoes in ceaseless change or bits of glass in a kaleidoscope, whence do they get their fantastic laws of clinging, and why do they cling in just the shapes they do?' For this the associationist must introduce the order of experience in the outer world. The dance of ideas is a copy, somewhat mutilated and altered, of the order of phenomena. James elsewhere showed that this entire view of the mind is erroneous, and that mind is not a passive container of ideas, but an *active* thing; that ideas have no way of compounding themselves or summing themselves up; that there is absolutely *nothing in one idea that would cause it to associate itself with any other;* that the associations which we make among things we make chiefly because of our human interest.

Thus the old issue which had, for many years, divided psychologists, is, with James, done away and a more fruitful set of problems is presented. James showed that there are

no permanently existing ideas and no impersonal ideas. This is a very important point, because people constantly have the notion that ideas are invisible things which can pass from one head to another; that an idea is something you can 'get'; that ideas exist in books or can be handed down by tradition, and so forth. This is a *superstitious view.* For if you use the synonym for *ideas,* the word *thought,* you will see at once that thought is the past participle of the verb to think, and thinking is an activity of some sort. It exists only where the activity exists – in our nervous system. What we have is a thinking, acting individual, who is organically one, and whose former experiences have in some way modified his present behaviour. It is largely due to James that the emphasis to-day has been placed upon activity rather than upon the mere knowing processes.

This placing of emphasis upon activity gives us a view of mental life which is very wholesome, for thus we are led to the recognition of the reality of the individual in a world of real things. The older thinkers who placed their emphasis upon mere knowing had the habit of conceiving all reality merely as a thing known; that is, as an object of thought. So, in the end, thoughts were substituted for things. The world was conceived of, primarily, as a thing of the intellect. The great philosopher Plato thought in this way. Plato held that *the ultimate realities are ideas;* that 'things' are only the expressions of, or manifestations of, these invisible ideas, and that to know reality is not to participate in any activity, but that reality can be known only when we contemplate good, true and beautiful principles. In the parable of the cave which occurs in his dialogue, *The Republic*, Plato expresses this view very interestingly. He pictures men living in an imaginary underground world, so situated that light coming from behind them casts on the wall of the cave moving shadows. The men, chained with their backs to the light, see only these shadows, and to them they are real, but the enlightened one, who has turned his thoughts to the higher

world of truth, knows that reality is something very different from the things that men call real. This 'Something' which lies outside experience can be found only in the world of the abstract, the eternal; all else is mere shadow, illusion. From Plato's time down, even to-day, thinkers have been fascinated with this idea of the 'fallacy of sense experience.'

This theory is an unhealthy one. It leads people to strive for imaginary escapes from the problems and tasks in their lives, and encourages them to seek fictitious goods in a world of fancy and idea. Thus it often leads people away from the realities of which their lives consist. It makes them feel that they are achieving something when they are merely indulging themselves in contemplation. It tends to divert thinking from its true ends and make it futile and unprofitable. In contrast with all this the point of view of William James is splendidly stimulating. The world is always real before him and interesting. It is not a world of philosophic meditation, but a challenging world, a world which cannot even be reduced to any philosophic system, but one which for our welfare or our unhappiness has many 'lines of influence' or kinds of connections among things. To discover and set up fruitful relations among things, and between things and ourselves, is the task of the mind, and the successful achievement of that task is the verification of the truthfulness of our thinking. Therefore, with James and others who followed him, we get away from what we call 'Intellectualism.' The emphasis upon activity led James to call his own philosophy 'Pragmatism,' a term derived from a Greek word meaning action.

§ 4

REALITY AND SELECTION

As James stands for *the reality of our world*, so he emphasizes very strongly the reality of individual personality. What we call self-consciousness, a thing of which many older thinkers

have made a mystery, James sees to be not so very different from our consciousness of anything else. Speaking of the *empirical* self, or *self as experienced*, he showed that our feeling of self is closely related to many things which really belong to the *objective world*. There is, for instance, what James calls the 'material self,' our bodies, our clothes, our possessions. We identify ourselves with them all. Any injury to them we feel to be an injury to ourselves. We often hear people say to one another, 'How do I look?' when they mean, 'How do my clothes look?' James says that most of the things which I can call 'mine' are in a sense part of me. Anything, in fact, which makes us feel elated when it prospers and dejected when it fails is really a part of the feeling about ourselves, and this self-feeling cannot be separated from our feeling about such things.

The same is true of what James calls our 'social self-feeling.' McDougall, treating of the point, seems to think that we have an instinct of self-appreciation and self-depreciation, but as we shall see later, McDougall's whole treatment of instinct is open to question. Certainly James seems to be more in accord with what psychologists subsequently have said on this subject. Our social self-feeling is the feeling we get from our relationships with other people. James showed that we have *many social selves*, each corresponding to some particular group or social interest. Properly speaking, he says, 'a man has as many social selves as there are individuals who recognize him.' And each of these social selves really behaves in a way that is different from the others. Thus a boy will behave differently at school, in the street with other boys, and at home with his parents. The soldier's honour is a different thing from the honour of a statesman or a judge. Here James has again anticipated many of the later developments in psychology, particularly the analytical psychology of Freud. There are often conflicts among the different selves in us. It may not be easy to reconcile the self-feeling and its associated habits which we get from one social group

with that which we have in other relationships in life. Beyond the social, there is, according to James, the 'spiritual' self, and this spiritual self is not a mere abstract principle of identity or 'number oneness.' It is difficult to detect any transcendental or spiritual element at all in this feeling. 'Whenever my introspective glance succeeds in turning round quickly enough to catch one of these manifestations of spontaneity, in the end, all that it can ever feel distinctly is *some bodily process*. . . . The self of selves when carefully examined is found to consist mainly of the collection of these peculiar motions in the head or between the head and the throat.' In other words, according to James, the feeling of self is the real experience in a world of facts just like other experiences, or as he would put it, it is a strictly *empirical fact*. Now, 'What is this abstract numerical principle of identity, this number one within me, for which, according to proverbial philosophy, I am supposed to keep so constant a look-out? Is it the inner nucleus of my spiritual self, that collection of obscurely felt adjustments plus, perhaps, that still more obscurely perceived subjectivity, as such; or is it perhaps the concrete stream of my thought in its entirety? Or may it be the invisible soul or substance, in which, according to the orthodox tradition, my faculties inhere? Or, finally, can it be the mere pronoun "I"? Surely it is none of these things, that self for which I feel such hot regard. To have a self that I can care for, nature must first present me with some *object* interesting enough to make me instinctively wish to appreciate it for its own sake.'

James finds such objects of self-love to be our bodies, our friends, our own dispositions, our ideals of ourselves, our actions, and any objects, in fact, in which we take a vital interest. Thus James puts the self of each of us out into the world of fact. He makes what is called self-consciousness a purely *objective feeling*. Although James is essentially opposed to the older idealists in these matters, we should not think of him as materialistic in the ordinary popular sense of

the term. Most materialists are mechanists; that is, they believe that the activity of living things is entirely determined by mechanical causes, and that therefore there is no place for choice.

Now the essential principle in James's psychology is that where mental life exists there is selection. The word *choice* stands out in James's psychology as in the writing of no other authority on this subject. He says that no actions but such as are done for an end and show a choice of means can be called indubitable expressions of mind. James makes mind consist primarily in the process of choosing. He makes this the distinction between mental phenomena and those which are purely physical. Let us note how he expresses this at the very beginning of his *Principles of Psychology*. If you put some iron filings on the table, then hold a magnet above them, placing a sheet of paper between the iron filings and the magnet, the iron filings will come to meet the magnet, but will be stopped in their course when they come against the piece of paper, and there they will stay as long as the magnetic current is in operation. Notice that the iron filings have *no alternative way of acting*. They can respond to the presence of the magnet in only one way, and if in that solitary way they do not succeed in reaching their end – contact with the magnet – they are doomed to failure. But now, says James, let us notice the behaviour of an animal which is rather low in the mental scale, a frog, for instance. Put the frog under water and hold an inverted drinking-glass over it. Soon the frog will try to come to the top of the water to get air. It will try many times to rise through the glass, but after repeated failures, the frog will do something which the iron filings cannot do. It will *take another course*. It is this ability to choose another course when the first fails, that James finds to be characteristic of all mental life from the lowest to the highest stages. It should be said that his whole psychology is written around this idea, which lies at the basis of his entire philosophic thinking.

§ 5

INTELLECT AN INSTRUMENT

As we go on with our study we shall see that we have here a very controversial point in psychology. There is a tendency on the part of a large group of psychologists to-day to take the mechanistic point of view, and assume that there are no real alternatives at all, but that every movement or action is determined entirely by physical conditions. This is rather an assumption than a proved theory. But it is an interesting and an inviting theory to many minds, because it seems to simplify the problems of psychology and to help the scientist to reduce all things to the same sort of logical system of causes and effects. James says, 'Now the study of the phenomena of consciousness which we shall make throughout the rest of this book will show us that consciousness is at all times primarily a selecting agency. Whether we take it in the lowest sphere of sense, or in the highest of intellect, we find it always doing one thing, choosing one out of several of the materials so presented to its notice, emphasizing and accentuating that and supressing as far as possible all the rest. The item emphasized is always in close connection with some *interest* felt by consciousness to be paramount at the time.'

The fact that mental life consists primarily in choosing gave James his great insight into the nature and meaning of the intellect. Hitherto men had regarded intellect as a copying device, a passive receiver of impressions. With James it is essentially an instrument.

The theory that the *intellect is an instrument* with which we may adapt ourselves to the environment, together with the doctrine that man is a choosing animal, is one of the most revolutionizing concepts in mental science. Before considering this matter more specifically I wish to discuss the issue which it raises in psychology. Mechanists will not

tolerate the thought that there is anywhere as an active factor in behaviour such a thing as purpose or selection. They do not believe that there are any alternative possibilities. All the acts of every living being are positively determined. They are simply the *equations of the forces* which play upon the organism. Thus, given a certain physical condition, a living being must act in only one way, and all the manifold actions of man and animals are declared to be predictable. Undoubtedly there are many purely automatic responses which living beings make to certain situations. Moreover, the scientific method requires that wherever it is possible to point out the factors that determine behaviour it should be done. But allowing for all this, it is a rather daring assumption to say that *all* movements and thoughts are determined in this way.

Professor Jacques Loeb is probably as representative of this view as anyone. As we saw in the previous chapter, he held that because of their peculiar chemical constitution living beings must necessarily make certain responses to stimuli. He called these responses forced movements or tropisms. He said that the more co-ordinated or complex forms of behaviour are made up simply of combinations of these forced movements, and that the combining of such movements in higher forms of behaviour is not the work of the organism acting as a free-agent. These combinations are the result of mere synchronizing of stimuli and movements. In other words, the *environment itself evolves what we call mind*. This evolution is brought about because certain stimuli again and again fall upon the organism at the same time, thus producing what, as we said in an earlier chapter, are called 'conditioned reflexes.' Of course, neither Professor Loeb nor anyone else has proved this theory experimentally, beyond the fact that certain very simple organisms, when their movements are definitely controlled in a laboratory, can be made to do certain things in such a way that a correlation can be established between the amount of the stimuli and

the extent of the bodily movement. When we come to consider the higher forms of life, the notion that all movements are mere combinations of tropisms, and *nothing more*, is an unproved hypothesis – a sort of faith which is very common to men who take an almost religious attitude toward mechanism. The matter comes down to this: The mechanist asserts that *if we knew enough we could see* that his theory is true in all cases. He does not claim that we do know enough.

But it is a serious question whether the mechanists' theory interprets the present known facts of psychology. In a large measure it may be regarded as a pure assumption, dragged into science from the realm of metaphysics. Behind this theory is the notion that the whole universe is dependent upon a *single all-embracing principle*. The older metaphysicians called this principle God, The Absolute, Substance, Brahma. More modern metaphysicians give this universal mystery another name. They call it First Cause, Force, and so forth. Like their predecessors, these men wish to believe that all the facts of existence are manifestations of this great principle and are reducible to the forms of human reason. In other words, mechanism is a phase of *rationalism*, it is pure metaphysics, for it assumes that the universe itself is essentially *rational*. And therefore, on the basis of such an assumption, the thought that perhaps there may be factors in human behaviour that are not reducible to a logical system seems to many a mind to be a sort of heresy.

It is surprising that men can hold this metaphysical theory so tenaciously in advance of greater knowledge than we possess. And even though we should succeed in pointing out logical and causal connections among all things, should we not even then have only one possible view of the world – one among many? It may be, as Bergson has argued, that there is such a chasm between the actions of organic and inorganic things, that one type of activity can never be adequately expressed in terms of the other. The changes in

inorganic beings seem to move in cycles; that is, they repeat themselves. But organic beings do not repeat themselves. They never actually pass through the same stage twice, for the reason that they are always being modified, firstly, by the process of growth, and secondly, by the traces left in their nervous structure by their own actions and experience. Thus, if it is true that an organic being can never again be made to pass through identically the same stage in its history, it follows that in each successive moment of its life there must be to some degree an element which is new, which has not existed before. And if the life history of organisms always contains an element of newness or uniqueness, however small it be, obviously it is impossible to reduce organic behaviour wholly to any system, since systems are static while organic behaviour is dynamic and ever changing.

Certainly James maintained this view along with Bergson, for he says, speaking of ideas, that we never have the same idea twice and cannot, because even though we think on successive occasions about the same object, yet the subsequent thought occurs in a 'modified brain.' The very thought that we are noticing an object *again* is different from our thought that we are seeing it for the first time. James, moreover, repudiated, in ways that I do not believe have been answered, the philosophy of 'monistic determinism,' which, as I said, lies behind mechanistic theories of life. He saw no reason why we should say that the universe is either logically or morally one. He rather doubted this assumption, and held that such unity as we can trace through the world of objects always creates a system which is *partial*, and which takes on its character as a result of the *standpoint from which we start*. In other words, all of our systems are purely human contrivances, through which we follow out certain 'lines of influence' which connect things in ways that happen to interest us.

Now, let us return to my statement that mechanism has not been thoroughly proved even in the psychological

laboratory. Do organisms have more than one way of responding to a stimulus? Professors McDougall and Jennings believe they have. McDougall distinguishes between what he calls '*purposive action*' and '*reflex action*,' and maintains that higher organisms exhibit both types. Even concerning the behaviour of the lower forms of life Professor H. S. Jennings is quoted as follows: 'Can the behaviour of amœba be resolved throughout into direct unvarying reactions to simple stimuli – into elements comparable to simple reflexes? For most of the behaviour . . . the stimuli can be recognized in simple chemical or physical changes in the environment. Yet there are certain trains of action for which such a resolution into unvarying reactions to simple stimuli seems unsatisfactory. This is notably true for some of the food reactions. In watching an Amœba following a rolling foodball, one seems to see the animal, after failing to secure the food in one way, try another. Again, in the pursuit of one Amœba by another, it is difficult to conceive each phase of action of the pursuer to be completely determined by a simple present stimulus. For example (in the pursuit described above) after Amœba B has escaped completely and is quite separate from Amœba C, the latter reverses its course and recaptures B. What determines the behaviour of C at this point? . . . One who sees the behaviour as it occurs can hardly resist the conviction that the action at this point is partly determined by the changes in C, due to the former possession of B, so that the behaviour is not purely reflex.' (*Behaviour of the Lower Organisms*, p. 24.)

Again he writes: 'The movements in these reactions are clearly not the direct results of the simple physical action of the agents inducing them. As in the higher animals, so in Amœba the reactions are indirect. . . . It is therefore not possible to predict the movements of the organisms from a knowledge of the direct physical changes produced in its substance by the agent in question.' (*Op. cit.*, p. 23.)

'Thus we find in the behaviour of unicellular organisms very little that can be interpreted in accordance with this local action theory of tropisms.'

All this is, in a way, a confirmation of James's position. In the *Principles of Psychology*, he says: 'All the centres, in all animals, whilst they are in one aspect mechanisms, probably are, or at least once were, organs of consciousness in another, although the consciousness is doubtless much more developed in the hemispheres (cerebral) than it is anywhere else. The consciousness must everywhere *prefer* some of the sensations which it gets to others; and if it can remember these in their absence, however dimly, they must be its *ends* of desire. If, moreover, it can identify in memory any motor discharges which may have led to such ends, and associate the latter with them, then these motor discharges themselves may in turn become desired as *means*. This is the development of *will;* and its realization must of course be proportional to the possible complication of the consciousness. Even the spinal cord may possibly have some little power of will in this sense, and of effort towards modified behaviour in consequence of new experiences of sensibility.'

'All nervous centres have then in the first instance one essential function, that of "intelligent" action. They feel, prefer one thing to another, and have "ends." Like all other organs, however, they *evolve* from ancestor to descendant, and their evolution takes two directions, the lower centres passing downwards into more unhesitating automatism, and the higher ones upwards into larger intellectuality. Thus it may happen that those functions which can safely grow uniform and fatal become least accompanied by mind, and that their organ, the spinal cord, becomes a more and more soulless machine; whilst on the contrary those functions which it benefits the animal to have adapted to delicate environing variations pass more and more to the hemispheres, whose anatomical structure and attendant consciousness grow more and more elaborate as zoological evolution

proceeds. In this way it might come about that in man and the monkeys the basal ganglia should do fewer things by themselves than they can do in dogs, fewer in dogs than in rabbits, fewer in rabbits than in hawks, fewer in hawks than in pigeons, fewer in pigeons than in frogs, fewer in frogs than in fishes, and that the hemispheres should correspondingly do more.' Let us omit for the present all discussion of the terms 'Consciousness' and 'Will' in the passages just quoted: all I am concerned about now is to show that James insists upon the place of selection in psychology.

In his Briefer Course, James says that as the functions of the higher centres are added to those of the lower ones, 'an animal's behaviour has become incalculable, we no longer can foretell it exactly . . . in addition to the previous response (which James is quite prepared to say consists of forced movements) to present incitements our frog now goes through long and complicated actions of locomotion *spontaneously*,' or as if moved by what in ourselves we should call an idea. Again, 'the lower centres act from present sensational stimuli alone. The hemispheres act from considerations, the sensations which they may receive serving only as suggestors of these – but what are considerations but expectations? – They are, in short, remote sensations and the main difference between the hemisphereless animal and the whole one may be concisely expressed by saying that the one obeys absent (objects) and the other only present objects.' This obedience to absent objects, objects which should not actually be present in any situation to which an organism responds, is something which does not seem to me to be explicable upon the strictly mechanistic theory. James uses the principle of selection all through his writing, and while much of his work has been subjected to more careful study, and sometimes to revision, by those who have followed him, he has not been successfully refuted upon this point. Nor has it been shown that his theory of spontaneity and selection is less true to the facts of experience

than the theory which mechanists would substitute for it.

A moment ago we said that James maintained the intellect to be an instrument for adapting the organism to its environment. I wish first to show the relation between this view of the intellect and James's theory of mental selection. Then I wish to show what is the significance of this view for all our thinking. James argued that mental life was essentially concerned with bodily movements. Even in the chapter on 'Will,' where he is sometimes accused of indulging in mysticism and moralizing, he still holds that all we can directly will is our own bodily movements. In the chapter on 'Attention,' he holds that attention is essentially a selective thing: that it is by noticing special aspects of the manifold environment that we not only give that environment some meaning, but also deepen in our own organization certain impressions which subsequently may determine our choices.

Certainly, when you stop to think of it, we are not uniformly or impartially responsive to the things about us. How little any one of us notices in a situation. We often fail to notice things which are actually playing upon us or stimulating us. For instance, as I write this chapter there is the pressure of my clothes; there is the weight of my body; there is the ticking of the clock; there are various lights and shadows and noises all about me; and these things are actually present physical stimuli, yet unless I make an effort to notice them, they go unobserved while I am occupied with patterns of action which are not directly called forth by my present physical situation at all. I am responding to stimuli which extend all through my past and have developed in me certain habits of thinking. Of the many kinds of vibratory movements in the material world, our sense organs select only a very few to respond to, sounds, lights, tactile impressions, and so on. Even among these there is again selection, for the *range* to which we can respond (for instance, the tones we can hear) is limited, and among the objects which we can see and hear

we really respond to very few. Those to which we really respond we arrange into a sort of *hierarchy of importance*, selecting only some of them as having significance. Among those which have significance for us we have our preferences. What is this whole process but selection? Is it not true that we are building up a sort of order among things, and building it up on the basis of our own survival and human interests and preferences? In other words, how could we behave in such ways as to secure our survival in the world if we did not make such selections among things? How could our lives have any meaning?

Except for the fact that, as James says, we are 'interested spectators' in the world of things, there would be no meaning at all. A being who was equally interested in everything could not be particularly interested in anything. The meaning of our world is the meaning which *we give to it*. A cross-section of what is happening at any particular moment is merely a 'booming, crashing confusion.' If we were merely acted upon by our environment and did not in any way *react upon* it or select within it the things to which we respond, it would be foolish to talk about our doing the things which make for our survival or future betterment. We intervene in the course of events, as Dewey says, in order that our future functioning may be richer. Our acting at all has this significance, that it causes certain things to become actual which, at the time we act, exist only in the world of possibilities, and our very act also closes a door to some alternative possibility.

Thus we are always saying 'yes' and 'no' to things. James made much of this fact that we are active and creative agents in the world. To the end our reasoning is partial. He shows that reasoning is possible only because we notice certain aspects of things which are relevant to our interests, and in noticing these things we ignore all other facts which may be said about any object which concerns us. Thus, if we are interested in the chemical constitution of water, we ignore

its thirst-quenching qualities, the fact that it is a fluid, the place of water in art; in fact, everything except the relation of water to two gases – oxygen and hydrogen. Now H_2O is not really water. It is only a symbol which represents a particular interest which we may have concerning water, an interest which, while we have it, excludes all other interests, if we are to think as chemists. So in all our thinking, thinking never gives us an equivalent of the facts of the world about us, but consists in the stringing together of symbols, which symbols are representative not so much of things as of some peculiar and especial interest concerning the things. These symbols we work up into systems, the value of which is to give us a better hold upon the world of facts. So, as James says, thinking is essentially a function of behaviour. It is instrumental and it derives this function because mental life is essentially selective.

If we were pushed about, as the mechanists say we are, if we were not called upon to decide about future events, being determined wholly by the past, there obviously would be no reason why we should think at all. Thus, according to our author, thinking is creative since it is out of our interests and out of the fact that we must act in certain ways to secure certain ends, that the meanings of life are created by us and for us. These meanings are purely *human achievements*, including as they do all our institutions, all our 'truths,' all our logical and moral systems. Truths are man-made. Truth, says James, is what we say about facts when they fit in to the totality of our experience. A fact *becomes true* when it is *verified;* the word 'verify' means to make true. So a fact becomes true when it *is made true*. This position is known philosophically as pragmatism, a word which James gave to the humanist point of view, and by humanism I mean the doctrine that truths are man-made.

It is obvious that scientific truths, like other truths, are man-made. They are not invisible or spiritual things which are given in advance. They are discoveries of relationships

among things of human significance which have been isolated for purposes of better knowledge. They derive their relative importance from the partiality of human reason and the process of selection which is basic in all behaviour. The meaning of any truth anywhere comes down in the end to be what we must do about it, hypothetically, if not actually. If an idea makes no difference to us it may as well be false as true. Thus, we see even the mechanistic doctrines of science are themselves highly selected instruments for dealing with reality. The mechanistic philosophy itself could never have come into existence if mechanism were a correct account of behaviour.

§ 6

JAMES'S INFLUENCE ON ALL THINKING

As with scientific truths, so with so-called moral, philosophical and 'spiritual' truths. These, too, are human devices. They are not, as Plato thought, eternal ideas existing in the world of pure contemplation. There are no eternal or absolute truths. The very word absolute means that which is out of all relations; therefore, that which makes no difference; consequently, that which may as well be false as true.

James found in this method of thinking not a system of metaphysics but an instrument for dealing with philosophical and sociological questions in a new and more fruitful way. It brushed out the dust that had accumulated through the ages of idle philosophic speculation. It did away with the older '*intellectualism*,' with its notion that mental life is strictly *a knowledge affair*, and it put in the place of the impersonal and static and predetermined universe of rationalism a new and more significant view of life. Things are not static. Man is making real choices in the mixed-up world of real goods and real evils, seeking to create some significant meanings out of the stream of events and actually helping to determine to some measure what the outcome of

human existence shall be. Therefore, the world is not the fixed thing that older thinkers thought it to be. It is an unfinished world, a world of which even a divine being, assuming him to exist, could not know the outcome. 'We shall never know what the world is,' says James, 'until the last man's vote is counted.'

In a strictly psychological discussion these philosophical considerations would not play a part, but some account of them is necessary in order to show the significance of what William James has done for psychology. Psychology in this sense makes a difference in our thinking. It has uses which may be of value to us in determining the ends toward which we are striving. It is more than a mere scheme for manipulating people. And also perhaps it is permissible to digress from the technique of psychology far enough to suggest what it would mean in the way of tolerance and effectiveness generally if people could hold their principles as James suggests we should. Principles should be *verified*. Most people wish to *vindicate* them. Principles are merely leading ideas. Their value is to lead us to more fruitful and valuable experiences and actions. The Intellectualistic philosophy has always in the end substituted a mere form of thought for the facts of experience. The philosophy of determinism always robs behaviour of its significance inasmuch as it always teaches that actions in the present are determined solely by the past. James's philosophy is a forward-looking philosophy. It shows that *future events* act as considerations in human behaviour and calls men to pay some attention to these future events and to learn to value them as real alternatives among which we have to choose.

The point of view of James is essentially anti-traditional. It is *empirical*. That is, it is an appeal to the facts of experience. It is opposed to our denying facts for the sake of logical consistency or in order to maintain some made-in-advance theory. It helps us to see the importance and seriousness in all living of the fact that man is a choosing animal. It does

away with the old static universe and shows us our behaviour thrown upon a background of real events in a world which is not underwritten and guaranteed, a world in which we have to take our chances. It leaves the future open. Suppose men could begin thinking in these terms about morality, religion, the economic class struggle, about politics and social problems. I am sure that new and more effective mental habits would be developed, and that psychology would contribute as it never has yet to the solution of the riddle of living.

CHAPTER FOUR

PSYCHO-ANALYSIS

What Freud and His Followers have done for Psychology

§ 1

NEARLY every one to-day has heard something of Freud and of Psycho-analysis. To many people psycho-analysis is a sensational subject or it is merely an amusing whimsicality. Often it is regarded as something more or less disgusting. Sometimes people look upon it merely as a new device for curing nervous patients of their ailments. The truth is that Freud's work in psychology is a very serious matter and constitutes an important development of the science. We are not concerned in this chapter about the psycho-analytic method of curing diseases. Our interest is in the new light which Freud has thrown upon human nature and in the contribution which he has made to psychology.

Psycho-analysis has been unfortunate in the type of popularization which it has received. It came to the public as a new and startling discovery. There has for a long time been an interest in *psycho-therapeutics*, or 'mental healing.' This fact is shown by the uncritical crowds who only recently followed Monsieur Coué when he visited this country. People wish for some magic cure. They have the notion that there is locked up in themselves a storehouse of spiritual superiority and material success, and if only psychology can speak the magic word we shall all be transformed into beautiful and effective beings. There is also in the public a half-conscious resistance to our moral conventions. People often like the discussion of forbidden topics, if only the discussion can be made to appear scientific. Knowing these facts, certain persons have naturally taken advantage of the situation, and have found in a distorted caricature of psycho-analysis a method of easy aggrandisement. Often the popularization of psycho-analysis has been carried on by well-meaning people who had no first-hand knowledge of Freud's

work, and had little previous training in psychology. The result has been that for a number of years psycho-analysis was a sort of fad. It was 'the latest thing.' Fortunately, this period has nearly passed. Many of the people who read cheap books about psycho-analysis and attended sensational lectures on the subject are occupied now with new and later fads. Serious students can now give their attention to this branch of psychology, without the feeling that they are in some way encouraging a popular fallacy.

It is also unfortunate in a way that psycho-analysis was not developed by professional psychologists in the universities. For this meant that many of those who became interested in it were, in a sense, outsiders, while the psychological profession as a whole has been very slow to take a serious interest in it. Psycho-analysis is an achievement of the medical profession and it has, therefore, what is to the professional psychologists a strange point of view. Its terminology appears to be inexact, unscientific, and even mystical. Moreover, it often challenges the introspectionist and behaviourist schools of psychology.

The result is that even to-day much of the teaching of psychology in American universities goes on as if Freud had never existed. Dr. Stanley Hall says that this indifference and hostility is one of the causes of the unsatisfactory condition of the science to-day. He says of the present condition of the science: '. . . I believe that there is a growing consensus of the competent that the condition of psychology in America, and indeed throughout the world, is far from satisfactory, that the promise of two decades ago has not been fulfilled. . . . Psycho-analysis and the study of the unconscious have been condemned on superficial grounds by most American psychologists of the normal. . . . Despite all the errors and dangers, psycho-analysis really marks, not the first, but the full advent of evolution in the psychic field.'

As psychology comes to be more and more important in our knowledge of human affairs, the work of Freud will occupy in

the future a larger and more significant place. Freud, like Darwin, has given the world a point of view, which not only is new in itself, but which necessitates the restatement of many beliefs which at first-hand would probably seem to have nothing to do with it. I am convinced that all our human sciences will be rewritten in the light of Freud's discoveries. Already the social sciences, sociology, economics, and social psychology are beginning to feel the effects of Freud's world-changing thought. To one who is familiar with psycho-analysis, many of our preconceived notions about politics and social theory are seen to be mere guess-work, and many of our prevailing social ideals and movements are seen to be very different in motive and character from their superficial appearance.

Hitherto psychology has been able to throw very little helpful light upon social situations. It is not enough to say that men's associations are due to the existence of group mind, as Professor McDougall does, or to the herd instinct as does Dr. Trotter, – or even to say with Professor Dewey that customs and traditions, in fact the forms of civilization, consist of habits. We need something more specific. Psychology must show us how those social habits are built up in the life-history of people, what ends they serve, what long-forgotten events in individuals' past may determine them, and we must also look to psychology for information concerning the *value* of various habits, – whether they are correct forms of adjustment to situations or are morbid fixations. We should know when people's thoughts and behaviour are really solving problems which confront them in the real situations of their lives, and when they are merely seeking escape from reality or consolation in defeat, or in some way to preserve their comforting fictions about themselves. I can see no answer to questions like these unless we take the work of Freud into account.

§ 2

A BRIEF ACCOUNT OF FREUD'S WORK

We have no time in this brief chapter to give anything like a historical account of psycho-analysis. But the main outline will be of some interest, I think. Freud, as I said, approached psychology from the practice of medicine. Before 1890, psychology had already taken into account the effects of abnormal mental life. Hypnotism was known, and cases were reported giving certain valuable facts about hysteria and other forms of neurosis. In James's *Principles of Psychology* there is a fairly good summing-up of the achievements of psychology in this direction at the time. One interesting explanation of certain abnormalities was that of 'multiple personality.' It was discovered that certain patients could be put into such conditions that they acted and seemed to regard themselves as really different persons at different times. Often, between these various 'personalities' which existed in the same individual, there were memory gaps of such a nature that when the patient thought of himself as one of these personalities, he could not remember anything that had to do with the other. Sometimes there was, however, a consciousness of the other personality, but no real connection between these various levels of consciousness. Psychopathologists gathered from such facts the conviction that much nervous disease was the result of a splitting of consciousness, as if a certain portion of the mind might be broken off from the main body of the association of memories, and in the detached condition seem to form a little association of its own. Many forms of automatic behaviour and of compulsive or obsessive ideas were explained in this way. Certain physicians whose task it was to treat such cases resorted to hypnotism in the attempt to reintegrate the broken-up personality. When the patient was hypnotized the physician made certain suggestions designed to re-associate the split-off elements of the mind with the main consciousness of the patient.

It was in this way that Freud at Vienna began his work with such patients in the early nineties. He found that when patients were hypnotized they often remembered things which they could not remember in their normal waking consciousness. When these forgotten facts, most of which were very painful to the patient, were later brought to his consciousness he commonly showed strong emotion; in fact, he reacted to them with very much the same emotional response that one would show in actually experiencing them. This was an interesting psychological discovery, for the patient might have been for many years unable to recall these unpleasant memories. More interesting still is the fact that very often when such things were brought to his mind, the emotion that he expressed seemed to clear things up for him so that he got well. From this fact it was concluded that his nervous trouble was due to his inadequate emotional response at the time of certain unhappy experiences. The bringing about of such a belated response in the effort to cure the patient was called the 'cathartic method,' and the emotional response which was produced by this method was given the rather awkward name of 'abreaction.'

Freud began his practice with these facts in mind, but he says in his early papers on hysteria that he had some difficulty in applying hypnotism. Often the patient refused to be hypnotized. At any rate, Freud said there were many persons he was unable to treat in this way. So he had to find another method of getting at these forgotten memories which were troubling the patients. He began by pressing his hands on the patient's head and suggesting that he or she would remember. In this way, after exhaustive effort, he found that he was able to bring out the forgotten psychic *material* into consciousness, just as had been done with patients who were hypnotized. Later he discovered that sometimes patients could recall their forgotten experiences when they were allowed just to talk freely and at random. Freud also discovered that when his patients told him their dreams, the

dream commonly had some relation to the facts which they were trying to recall. In this way Freud learned the technique of interpreting dreams. It was in a sense similar to the technique which he had employed in interpreting to his nervous patients the significance of forgotten things, which in themselves had often proved to be insignificant to the patient even when recalled.

Freud's work on dreams is the classic study of the subject, and is one of the most important books in the whole science of modern psychology. After accumulating thousands of studies of dreams, he was able to show the psychological meaning of dreams for the first time in history. He learned that the dream is a symbolic expression of some hidden wish; that it contains elements in it which go back to infancy; that the wish is generally one which we do not admit that we entertain; that the dream is invariably egoistic; in other words, that we are in some way actually, or under certain disguises, always the hero of our dreams. Perhaps a simple case reported by our author will make clear the way in which he made use of dream analysis to learn what was in his patient's unconscious mind. One of Freud's patients, a young woman, unmarried, related to him that she dreamed her nephew (her sister's only son), a young boy whom she loved very much, was dead. Freud, by getting her to remember all the facts associated with this dream, succeeded in interpreting it somewhat as follows : Several years ago, this young woman lived in her sister's house. At that time she was engaged to a certain young man whom her married sister disliked and, owing to the sister's opposition, the engagement was broken off. The patient, at least consciously, accepted the inevitable and believed that she had come to agree with her sister's judgment. The young man went away and she did not see him for several years. At this time the married sister had two boys. The elder one died, and at the funeral service the patient noticed that her former fiancé had returned. She saw him as she stood beside the casket contain-

ing the body of her nephew. In the dream she now recalls that he is again standing in the same position beside the casket containing the body of the second boy who she dreams is dead. Centreing her attention upon this fact, brings to her the consciousness that the dream merely means, not that she wished her nephew to die, but that in fancy she is duplicating the scene in which her lost fiancé returned. Hence the dream is an expression of the wish that some accidental situation might bring this man back to her.

Freud learned that there were many typical dreams; such as falling, flying, being undressed in the presence of a group of people, being submerged by a tidal wave, and so on. All these are typical symbols of certain wishes which we have but do not recognize. Thus Freud was led to the theory of the unconscious. The unconscious consists of those forgotten facts and wishes which we cannot recall at will. The reason why we cannot recall them is that they have been 'repressed'; that is, they have not been reacted to adequately, for the reason that such a reaction would be painful. While, therefore, we do not attend to these wishes and memories, they exist in us just the same, and they produce in us certain effects. Sometimes the unconscious impulses are expressed in bodily symptoms as in hysteria. It has long been known that there are a great many persons who apparently suffer certain ailments while physically there is really nothing the matter with them. Freud has shown that the symptoms in such cases are really symbols of something in the unconscious. In other words, it is as if in some respect the dream thought or wish were haunting the individual during his waking hours. The same is true with the various actions and ideas of the insane. Curiously enough Freud has demonstrated that errors in speech, forgetting in general, and in fact, a very large part of our daily life, are all expressions of things which exist in the unconscious. In the *Psychopathology of Everyday Life* Freud discusses these things, giving many illustrations in proof of his contention that even the tiniest and

most insignificant things are really governed by the laws of cause and effect. The discovery of the specific causes of acts which otherwise we should regard as purely accidental in ourselves has led to a new view of human nature.

We are not the beings we consciously think that we are. There exists in us each and all something of the animal, the savage, and a large element of childish egoism. The conscious habits which we build up through the course of our lives, hold these more primitive impulses in check. We get the habit of diverting our attention from them. We come to picture ourselves as persons in whom primitive trends do not exist; but they do exist, and in many disguised forms they assert themselves. So, while primarily psycho-analysis has to do with curing persons who are mentally abnormal, it shows us our normal behaviour in a new perspective.

§ 3

THE UNCONSCIOUS

Perhaps I can make clear this matter of the unconscious by a simple analogy. Let us say that a man leaves his home to attend a lecture. He gets in the train several miles from the hall in which the lecture is to be given. He may probably during that time read a paper or book, or talk to some one. He may not once during the entire journey consciously think of the lecture or his purpose of attending it. It is as if he had made a connection between the purpose of attending the lecture and the correct station at which to alight and then, having made such a connection, he drops the matter out of his mind until the name of this station is called out. Then he suddenly gets up almost automatically and steps out on the platform. I have often seen people step out on the platform in a rather dazed condition, as if for a moment they could not consciously recall how they happened to be there. Now, during the time that our traveller is on his way to the

lecture, he is not thinking about the lecture or the station. Nevertheless, unconsciously, he has for the time so organized himself that the calling of the station automatically discharges him into activity. That is, the purpose to attend the lecture becomes an impulse to act when the fact in the environment with which it is associated is present.

Now there are formed in the lives of all of us many such associations. Purposes that we have long forgotten, tendencies in ourselves which we have 'subdued and mastered,' unhappy experiences and desires which are inconsistent with our disciplined and mastered characters, may operate in us in a way similar to the operation of the purpose to leave a train at a certain station. We may not even know just what these associations are. Nevertheless, the forgotten purpose may be incited to some incipient degree by thousands of things which we never think of as being associated with it. Thus whole elaborate systems of unconscious association may be built about certain of our suppressed desires and we may, quite unknown to ourselves, be experiencing tendencies to act upon these repressed impulses. These tendencies of the unconscious do not commonly throw normal people out of harmony with their environment. We may be reminded of some vague forgotten experience by smelling a flower or hearing a song; we may have certain likes and dislikes of people which we cannot understand; sometimes we may have a curious feeling, on seeing certain objects, of having been in certain places before, when we know that this is impossible. Sometimes we find ourselves inaudibly repeating lines of poetry or silly jingles for whole days without being able to stop, and we wonder why that thing keeps running through our heads.

If this were all that the unconscious did in our lives it would not be a very serious matter; but it might be interesting psychologically. But we shall see as we go on that many of our religious beliefs, our moral ideals, and our social philosophies, as well as many of the customs and traditions of

organized society, have the function primarily of expressing in symbolic form certain of our repressed wishes. Our lives consist of fictions and whims to a degree that is quite unsuspected by us and oftentimes, when we act upon such fictions, we are surprised to see that we thought we were doing one thing when we were really doing something quite different. The abnormal mind becomes the victim of these systems of association which are built about its repressed wishes. So much so, indeed, that one may lose his sense of reality altogether, and be unable to distinguish between fancy and fact. In many cases it is as if one were dreaming throughout the greater part of his life a dream from which he could not be awakened. In a sense, we are all 'the stuff that dreams are made of.' The unconscious with its dream thoughts exists underneath our conscious life like a stream flowing under a foot-bridge. Our acts of conscious attention are like planks thrown over this stream, resting upon rocks which here and there rise above the surface. We throw out these efforts of attention in order that some conscious purpose may cross over to an achievement, but the purpose seldom gets across with dry feet; often we upset the planks and tumble in altogether.

As Dr. Stanley Hall has pointed out, we are greatly indebted to Freud for our knowledge of the processes by which one reaches his mental maturity. The *psyche*, or mental nature of the maturer person, is not so much a growth as it is an achievement. During childhood and adolescence each one of us has passed through various critical periods, periods in which there had to be achieved a definite integration of the forces of our nature, and in which it was necessary to detach our interest from various objects that held our love and loyalty, and to find new interests and new ways of reacting adequately to an ever-widening environment. 'The child,' says Freud, 'is naturally polymorphous perverse.' By perverse he means that the psycho-sexual life of the child differs from that of the normal adult, in that it is not attached to

the same love objects as it is with normal persons. There is a period when a child is egocentric; a period when he attaches his love to one or both parents; a period also which is called *narcissism*, in which the growing youth himself becomes the object of his love. In the process of psycho-sexual development there are many places where the emotional life may go astray. Wrong environmental influences, hereditary defects, or a bad start may cause the individual to become the victim of various 'fixations.' That is, if at any point of his development he has failed to solve the problems of a certain critical period, he is likely to remain fixed in the emotional attitudes of an earlier stage of his development. This fixation is frequently accompanied by a certain *complex* of ideas. Sometimes this complex may be an unconscious wish, often it is a conflict which is going on unconsciously, in both cases the wish or the conflict is associated with a system of ideas. The individual will, then, in all likelihood, be unable to meet certain situations in his later life.

The perverse tendencies which Freud says exist in children are, as he puts it, *polymorphous* – that is, they are many-form. Physiologically the little child has various *erogenous zones*, or areas in the body which respond with sex feeling to stimulus. During the process of growth, in many of these zones there must be a repression of the erogenous type of response to stimulus, and the *libido*, or capacity for love excitement, must be directed toward the organs which in later life serve for reproduction. Along with this reintegration there must be such a building up of functional capacities as will enable the individual to behave normally in the situations of his mature life.

There are individuals who, unfortunately, retain various of these perverse tendencies. Some are consciously or unconsciously *sadistic;* that is, their sex interest instead of being associated with affection is associated with the love of cruelty. Others are *masochistic* – that is, they retain consciously or unconsciously in later life a curious sex-excitation in experi-

encing self-torture. Others may remain *autoerotic;* that is, they are never able to free the sex interest from their own persons so that they can give themselves whole-heartedly to anyone whom they love. And finally, there are, of course, certain individuals who remain in mature life, either consciously or unconsciously, *homo-sexual* – which means that they more easily love a person of their own sex than one of the opposite sex. When these maladjustments occur in mature people we speak of them as perversions. If I understand Freud correctly, he wishes to imply that tendencies to all these perversions exist in small children and are not, with them, really abnormal. Normality, therefore, is achieved by habit formation. But the habits are not easily acquired, and none of our habits of normality are so thoroughly achieved as to destroy completely the infantile elements in our psychic life. We trail behind us not necessarily 'clouds of glory,' as Wordsworth said, but our unconscious carries in a more or less repressed manner all that we have been or lived through, or have failed to become.

So far we have spoken about the *repressed elements*, which exist in the unconscious of the individual, normal and abnormal. Much more should be said on the subject. I would suggest that the student read such books as *Mechanisms of Character Formation*, by Dr. William White; *A General Introduction to Psycho-analysis*, by Freud; *The Neurotic Constitution*, by Dr. Alfred Adler; *Psycho-analysis*, by Dr. A. A. Brill. Repression in itself is not an evil. It is positively necessary if there is to be any order or effectiveness in our lives. All thinking and all habit formation depend upon it. One of the misrepresentations of psycho-analysis has to do with this point.

During recent years there has developed a school of scamp psychologists, who have told their followers that repression is an evil which may result disastrously for them. They compare the repressed 'energy' in the psyche to steam which is enclosed in a boiler without any possibility of escape and

they picture the neurosis as a form of explosion, thus telling young people that if they allow themselves to be 'repressed' by moral conventions or by our present social system, they are running the danger of a frightful neurotic explosion. They point to the doing away with inhibition as the path of happiness and effective living. Candidly, this is sheer nonsense. Doubtless there is more restraint in modern civilization than would be necessary if men were intelligent enough to govern their behaviour by ideals which are relevant to the situations in which they act, but that is another matter. It has to do with what I hope may some day be a common-sense attitude toward morals. We are not, however, discussing morals now, but psychopathology. Every repression involves in some way a conflict. But if the repression is *successful*, the conflict is solved to the satisfaction of the individual. What psychology is concerned with is *unsuccessful* repression, and such repressions demand not that the people 'go on the loose'; they demand *re-education*. If people tried to live without any inhibitions, they would very soon find themselves in much more serious conflicts than they were before. For us, as students of psychology, the important fact is just the difference between a successful and unsuccessful type of repression. Sometimes a successful type of repression is called 'sublimation,' which means that there has been set up in the individual, through the creation of what in an early chapter we called a 'conditioned reflex,' habits which direct his repressed psychic energies toward socially acceptable ends.

The interesting point about material which is unsuccessfully repressed, is that it comes out of us in some sort of *disguised form* and leads us to actions and thoughts which are often not what we think they are. Thus, there was reported in a recent psychological journal the case of a man who was subject to what were apparently epileptic attacks. It seems that his father had fainting spells due to heart trouble. The simplest explanation of the case would probably be to say that this

man had inherited the disease. Close examination, however, revealed the fact that the patient's attacks were not due to epilepsy or to heart trouble, but were of a hysterical nature. That is, they were a symbolic expression of some wish or conflict. Analysis revealed the fact that in this man's childhood there had been a morbid fear of his father, and a stronger than normal attachment to his mother. The fact was also revealed that the patient was employed in the office of an elderly man who was very strict morally, and whom the patient unconsciously identified with his father. An attachment grew up between the patient and one of the female employees with whom he worked. Fear of the employer's disapproval was stated as the cause of the neurotic symptom of fainting. When the picture of this patient's psychic life was sketched out, it was found that his fear of his father was associated with an unconscious love of his mother, and also was often associated with an unconscious identification of himself with his father. The pseudo-epileptic attacks of fainting were the symbol of this self-identification, since the father had suffered from heart attacks. They were, therefore, a neurotic and ineffective form of protest against the authority of the employer to whom the patient had to defer. It will be seen that most neurotic symptoms, like most dreams (Freud would say all of them), have the function of expressing in symbolic form some such repressed wish or conflict.

There are three or four types of expression which the unconscious may assume, all of which have interest for our study. First, there are what we might call *mechanisms of defence*. Such mechanisms are fabricated by the unconscious to protect one's feelings about himself against the recognition of tendencies in his own nature which are unacceptable to his conscious. Thus, the individual to whose case we have just referred, suffered his attacks of fainting because they were in a way a defence of his ego. So Freud reports a case in which a young man suffering from compulsion neurosis behaved similarly. Compulsion neurosis is a neurotic disease in which

individuals find themselves compelled even against their will to say and do things which are often silly or injurious. The case reported by Freud is that of a young man who was impelled to stay in his room for fear that he might do somebody an injury, and who spent his time writing alibis so that no one could accuse him of having committed murder. Analysis in this case showed that the patient unconsciously had in mind the thought of killing his father, who, as a matter of fact, had been dead for a number of years. Here was, as you see, a fixation of the nature referred to above. In this case, as in the case of the man who suffered with fainting spells, the unconscious cause of the difficulty was an infantile attachment to the mother image, and a consequent fear or hatred of his father. This situation is rather common. It is known as the 'Œdipus Complex.' You will remember that in the Œdipus myth of the ancient Greeks, Œdipus is led by cruel destiny to kill his father and marry his own mother, Jocasta. It is interesting to note how great a part this myth plays, not only in the dream literature of the world, but also in the great religions. It may be argued, therefore, that there is an element of the Œdipus Complex in most people, and that much thinking serves the purpose of a defence against it. If not the Œdipus Complex itself, then any form of the feeling of inferiority may lead people to fabricate defence mechanisms. Until one has his attention called to this fact, he probably never realizes how much the conscious behaviour of normal people is motivated by the wish to defend the ego against the feeling of inferiority. Much ambition, the wish to be important, moral reform, social unrest, even race riots, should be regarded as defence mechanism.

The second type of mechanism fabricated by the unconscious might be called the *mechanism of compensation*. Whenever there is a psychic loss of any kind, the unconscious seeks imaginary or fictitious goods to put in the place of those lost. Thus, one who has a serious defect in his character may 'over-compensate' for it by going to the other

extreme. Illustrations of these mechanisms may often be seen in the prudishness of certain people whose excessive delicacy on analysis reveals the existence of the very opposite, – that is, the prudishness is over-compensation for the morbid and infantile obsession with the obscene. Religion may also be used for compensation in this way, as well as many 'virtues of extenuation and self-justification.' Thus, men who live dissolute lives are usually very sentimental about their mothers, and the corrupt politician is frequently over-conscientious about domestic morality.

Thirdly, there is a type of behaviour which has been called the *mechanism of escape*. Thus, when for any reason people find themselves unable to react adequately to the realities about them, or to derive satisfaction from the world of facts, they have a tendency to substitute for the true meanings of things fictions of their own fabrication. In imagination they strive to 'shatter this world to pieces and mould it nearer to their hearts' desire,' thus, 'stone walls do not a prison make nor iron bars a cage.' Love is not sex; death is not death, but entrance into life eternal; and the wretched struggle for existence in civilization is not the inevitable lot of man on earth, but is merely contingent upon the existing social system, and could be changed in the twinkling of an eye by the ballot or mass action. Most heavens and most utopias are escape mechanisms of this sort. Such mechanisms exist in their completest form in the delusions of the insane, where reality is completely repudiated and the tortured spirit takes refuge in a substitute world of wish-fancies. Often associated with these mechanisms is a phenomenon which Freud calls *regression*, which means that many persons who are fixed, as we have said, in earlier emotional forms of response, tend when they are in difficulty to return in thought to the parent images – usually the image of the mother – and to behave as if they were taking refuge in the protection of the family circle. This is a very common wish and it motivates more of our behaviour than we think.

Finally, there is what should be called the fact of *rationalization. Rationalization is not rationality*. It is the fabrication by the intellect of systems of ideas, which render plausible and give specious explanation or justification to impulses and actions which are really determined by the unconscious. Thus a subject who is hypnotized may be given a 'post-hypnotic suggestion.' He may be told, for instance, that after he has awakened, say at three o'clock in the afternoon, he will go and knock on the door of a fellow-student's room. At three o'clock he is very likely to do this. But he does not remember in his waking consciousness the suggestion which was given him while under hypnotic influence. Now if the subject is asked why he knocks at this particular door at three o'clock, you will find that he is fairly sure to have a plausible explanation for his conduct. He may say that he wanted to borrow a book, or that he remembered that he and the student had an engagement which he wished to talk over. These explanations are 'rationalizations,' and any behaviour which is motivated by an unconscious wish is very likely to give rise to rationalizations of one kind or another. The delusions of the lunatic are rationalizations, and so, also, I regret to say, is the great portion of public opinion and of crowd-thinking and propaganda.

§ 4

FREUD'S PLACE IN PSYCHOLOGY

In closing, perhaps we should note some of the criticisms of Freud's discoveries and beliefs. Most of these criticisms are motivated by considerations that have nothing to do with the case. There is, for instance, as Freud himself has pointed out, strong objection to him because of the resistances which men have to the candid discussion of sexual matters. There is often a feeling, therefore, that Freud places too much emphasis on sex. Whether he has done so or not is a matter to be decided by further study. Certainly on an empirical

ground, and on the basis of the many hundreds of cases with which he worked, he is justified in giving the explanation which he has given of the symptoms of these particular cases. I think much of the difficulty concerning this point arises from Freud's peculiar use of the word 'sexuality.' He makes it mean almost the entire instinctive and emotional life. Perhaps such terminology does blur distinctions which should be kept clear. Thus the distinction between sex and ego is not quite clear in Freud's work. Dr. John T. McCurdy pointed out this fact. But Dr. McCurdy's criticisms are quite technical and, moreover, McCurdy retains much of the old instinct psychology which is to-day under severe criticism.

Again Freud has been obliged to use figurative language to express some of his concepts. For instance, he speaks of the existence of a psychic 'censor' between the unconscious wish and consciousness. I think he should not be taken too literally here. For he is dealing with new ideas and should be allowed a great measure of freedom in expression. The same, I think, is true of the use of the word libido, by which he means sexual energy. I suspect he is often led to use the term 'unconscious' as if the unconscious were a sort of psychic storehouse, rather than a term by which are expressed behaviour trends and processes which are not accompanied by full awareness. Freud himself has modified his earlier theory that abnormal mental life is due to a shock, or 'trauma,' and that the symptoms may all be removed by 'catharsis.' A discussion of this point would lead us to the medical side of the Freudian psychology, and this is not the object of our present interest.

Freud has given us on the whole a new view of human personality. He shows that the self of each of us is wider and richer than we had thought before, and that we retain vestiges of primitive life even in our highest and most civilized thought and behaviour. He has shown us the rôle that fictions and wish-fancies play in fixing the destiny of man. He has given us a new kind of determinism, not the

old mechanism of the brain physiology. He has pointed out in a very helpful way the causal connection that exists among ideas themselves, and in the sequence of events in which men play an active part. His influence on the whole is on the side of wholesome self-criticism, which is a true educational aim, and it also makes for a more decent candour in society. In social philosophy he has provided us with a criterion by which we may know when people are seeking to solve problems and are really working for better order of things, and when their behaviour is merely motivated by a wish to solve their inner conflicts, save their faces, and substitute for the realities in life a system of fancies and fictions. Freud has made a most significant discovery in a realm where new knowledge is most needed, and is most important. The world is looking to psychology to-day as never before for the answer to some of the deepest questions of our lives. Freud, it seems to me, has gone further to provide us with a method of answering these questions than has anyone else in our times.

CHAPTER FIVE

WHAT PSYCHOLOGISTS THINK ABOUT CONSCIOUSNESS

§ 1

I HAVE sought throughout the previous chapters to avoid the use of the word 'consciousness,' because to many psychologists 'consciousness' is a bad word. They think it is mystical and unscientific and obsolete. Therefore, before we could use it we should have to make up our minds whether we have, psychologically speaking, the right to use it. For as a matter of fact the problem of consciousness is a very much debated problem among contemporary psychologists.

You might say, 'Why ask whether we are conscious or not? Of course we are conscious. Whoever doubts that he is conscious?' One would have to be conscious in order to doubt his consciousness. We know the difference between a man who is awake and aware of things, and one who is unconscious because he is under the influence of some anæsthetic, or because he has fainted, or is asleep. We know the difference, too, in our own behaviour between that which is accompanied by consciousness and that which is not. Something may be in your environment, may have been there all the time, playing upon your organism, and you may suddenly give it your attention. You will say, 'I was not conscious of that; now I am.' Why shouldn't we just take the whole problem on that perfectly obvious and simple, straightforward basis?

Well, the problem is not quite so simple as it appears. What do you mean by consciousness? Do you mean, let us say, that something comes from outside things into your mind? Or is our consciousness something that stays entirely within the mind? When we are conscious, just what is it that we are conscious of? Are we conscious of objects in the outside world or only conscious of our subjective images of those objects? And if we start with the inner images of consciousness, then how are we ever going to get into the outside world, and if we start with the facts of the outside world,

of which we say we are conscious, how are we ever going to show that those facts have some kind of capacity in themselves to sum themselves up and make themselves our personal consciousness? If you are conscious, are you conscious that you are conscious? Surely it would be a strange thing if we were conscious and not aware of the fact.

Yet, William James says if we have to be conscious that we are conscious in order to be conscious, we might just as well say we have to dream that we dream in order to dream or to swear that we swear in order to swear.

'Consciousness' troubles scientists especially because it seems to upset the rational order of things. Scientists like to have things explained in terms of cause and effect. They like to establish a logical sequence beginning with the atom or with the planetary system or the nebulæ, and like to show that between the largest and smallest facts of our world there can be built up a definite scientific order. Consciousness seems to break into this order from some outside world to upset our calculations, and bring in another kind of causation.

Some scholars who are particularly mechanistic would like to get rid of the whole problem by thrusting it out of the door. Others who are more or less willing to accept a haphazard view of the universe are not greatly bothered by the problem. Others who take a spiritualistic view, those who might be called 'mystics,' are inclined to put great emphasis upon consciousness and hold it sacred.

There is to-day, therefore, among psychologists a very great confusion and debate over the question. Some, like Woodworth, allow the fact of consciousness, but they are inclined to try, just as far as they can, to minimize its importance and to explain psychology in other terms. Others, like the Titchener group, isolate consciousness and try to study it as if it were the solar spectrum. And others, like Dewey, are inclined to say, that we should not spell consciousness with a capital 'C'; or hold it to be any particular *thing*, but say that some facts of behaviour indicate that the subject has *fore-*

knowledge of events. Others again, like McDougall, seek to base belief in consciousness on some animistic or mysterious element which you might call the 'soul.' Finally there are those who, like Watson, simply dismiss the question. They are not interested in it, asserting that it has no scientific significance whatsoever.

So you see psychology to-day is in a very curious situation regarding what most of us, as laymen, and many psychologists also, would say is the basic fact of psychology. Woodworth and others would have no hesitancy in saying that psychology is the science of those conscious processes which we call experience. Dr. John B. Watson says, that psychology is the *science of behaviour* and leaves consciousness entirely out. He has troubled a great many scholars. This development in psychology is known as *Behaviourism.* Now, to leave consciousness out of the science does not necessarily mean to deny its existence, but to leave it out and at the same time to assert that it is existent and that it is important, would be greatly to limit the scope of psychology for the sake of a method.

§ 2

FOUR THEORIES ABOUT CONSCIOUSNESS

I wish, briefly, to sketch out four prevailing views of consciousness and then we will discuss them and see what we can make out of them.

We were in an earlier chapter discussing the relation of the mind to the body. I said that there was in psychology a traditional view called *parallelism*, according to which mental and physical processes form two separate and distinct streams of events, neither of which influences the other. There is the body with all its movements, the whole physiological-organic process of our growth, the organ movements and the disturbances in the nervous tissues, which are all purely

physical, and might be conceivably expressed in mechanical terms.

Then there is the stream of consciousness, and this stream of consciousness runs right alongside the other – *a one-to-one correspondence*. Suppose you say that consciousness depends upon or is accompanied by, as James would have said, brain changes, so that for every impulse of consciousness, for every complicated fact of it, there is a corresponding complicated movement in the particles of our nervous system. Therefore, there is an absolute correspondence. This way of looking at the relation of consciousness to physical processes would be called the parallelist theory of consciousness.

According to the parallelist theory, they are two streams of events and they are absolutely separate; they have nothing to do with each other. In one place, on page 182 of his *Principles of Psychology*, James seems to hold just such a view, saying, that we must not confuse physiological facts of brain change with the facts of consciousness, and that when we do so, we are confusing two worlds.

There is a second view of consciousness which is called the interactionist view. According to this view, these two processes are not absolutely separate, but though they run along fairly well together they influence each other, as, you might say, two magnetic currents might draw together or repel each other; the body might influence mind and mind influence body in such a way that the two streams or processes interact; hence, the word *interactionism* is used to describe that view.

Then, in the third place, there is a view which I hardly know how to name, the view of Prof. Sigmund Freud. Dr. Freud's view might be called the *focal* view, that is, he holds that consciousness is only a small part and a rather incidental part of the mind or the psyche. The greater part of the mental life of man goes on unconsciously. It is located in the deep centres of his nervous system, where it is protected from too much stimulus and too great disturbance. This deep location

of the memory traces of our life and our inherited impulses in our lower nerve centres he calls the 'unconscious.' There is a small portion of our reponse to stimulus which is lighted up and is conscious *under certain circumstances.* Consciousness is located, he thinks, in the cerebral cortex, or the grey matter, on the convoluted surface of the cerebral hemispheres of the brain.

He says that through a process of evolution this surface of the brain developed from a primal surface of the living cell. It has always been very greatly exposed to stimuli; it has been played upon so many times that all capacity to remember has been taken out of it; it doesn't retain and therefore it acts instantly and its instantaneous action is consciousness. Therefore he would hold that the memory traces and deeper facts of mental life are retained by the unconscious in the lower levels of the brain and the nervous system. The difficulty with Freud's view, to my mind, is that it is very fanciful, that it is not provable, and that it is an hypothesis which is hardly in accord with the facts. For instance, when you are conscious, if you are, obviously you do not merely gaze at things blankly and let them make their impressions on you; neither do you merely receive impressions. Consciousness is an active thing, if it exists at all. What we do is to *contribute something* out of our own thought processes, out of our memory. We should have no knowledge of anything if we did not contribute to our awareness of objects, some elements of our past experience. Therefore if we are going to limit consciousness to the mere reception of stimuli in the present moment, we have only what Santayana calls the merest elements of mental life, 'essences,' about which you can say nothing; you cannot even say they exist.

Surely this would not be a very fruitful hypothesis. I have no quarrel with Freud's theory of the unconscious. I merely say this particular attempt to explain *consciousness* seems to me not quite in accord with the facts.

The fourth view of mental life or of consciousness would,

of course, be the extreme behaviourist view which is, as I stated a minute ago, 'out with it all.' Let us study simply the kind of responses that organisms make when we stimulate them, let us leave out entirely the whole question of 'consciousness.' Watson would even say that it is a 'spook,' unnecessary in science and only confusing.

§ 3

A CRITICISM OF THE THEORIES OF CONSCIOUSNESS

Let us examine these various views and see if we can wholly dispense with the notion of consciousness. First, let us discuss the parallelist theory.

If physiological processes move on one level and conscious stream moves on another level, and if one never has anything to do with the other, a second problem is raised, and that is, by what providential arrangement do these distinct processes correspond so closely? It seems rather remarkable that by some kind of 'pre-established harmony,' for every physical state there should be a certain mental state. Some scholars say that consciousness is *produced* by the physical stream; in other words, the physical is the cause of consciousness. Hence, consciousness is mechanically determined by physical processes. This view, James called, following Huxley and Clifford, the conscious *automaton theory*.

Let us look at this theory and see what it makes of consciousness. It makes consciousness what has been called an *epiphenomenon;* that is, consciousness has no more to do with life according to this theory, than the white mark left by a piece of chalk has to do with determining my making the mark. Our conscious life is like the phosphorescent streak left on a dark wall after a match has been rubbed on it; it has nothing to do with the rubbing of the match; it produces no effects. It is, itself, merely an effect and therefore *cannot effect* a thing in the material world.

Each movement of our body, each change in the nervous tissue, each nervous discharge, is the effect not of an idea, it is the effect of the preceding or of some preceding bodily movement. If one bodily movement causes the next bodily movement, then we do not need mind to explain any bodily movement.

Or, to put the thing a little differently, there is the illustration which James quotes: 'Let us assume that an idea can intervene between bodily movements and effect something.' You might as well say, here is a train of trucks. The first two trucks are coupled together with an iron bar and the last two are coupled together with an iron bar, and the trucks are coupled to the engine with an iron bar, but mystics want the middle two trucks to be coupled not by an iron bar but by the sentiment of good will that exists between the driver and the guard. Thus, the intervention of an idea between our bodily movements, which are purely material movements, would be exactly like trying to couple cars with good will.

Therefore, consciousness is purely an *epiphenomenon*, or useless by-product. This is probably the theory of most materialists, or mechanists. It is often announced as a very late discovery. As a matter of fact it is an old view, and was best stated by Huxley a generation ago.

James asked two questions about this theory, which I think are pertinent. James asks, 'If consciousness has nothing to do with the behaviour of an organism, if it is like the phosphorescent glow that comes after it, how did it ever happen to be evolved in the *struggle for existence*?' We know that animal species in the process of evolution tend to preserve those characteristics which work to their advantage in the struggle for existence. Now, it seems that the higher organisms have the most consciousness. If that is true, how could the higher organisms be endowed with such consciousness if consciousness had no survival value? And if consciousness effects nothing, of course, it has no survival value. James says, 'Isn't it strange that it should have nothing to

do with the matters which it so closely attends?' It is merely a fact of biology that the creatures which happen to have the most consciousness have succeeded in the struggle for existence. Therefore, it would seem that consciousness has survival value; and if it has survival value, it would seem that it must in some way have something to do with life. Secondly, James says that pleasure and pain seem to be connected with the survival of an organism. In other words, on the whole, evolution has weeded out those organisms which take pleasure in things which tend to destroy them. Ordinarily, pleasure seems to be associated with those actions which make for the welfare of an organism and the species. If feelings of pleasure and pain have nothing to do with this behaviour, as they could not if consciousness had nothing to do with it, then obviously we should have to explain why destructive acts are painful and helpful acts, on the whole, are pleasurable. Pleasure and pain do seem to be working principles, if you look at the behaviour of organisms in relation to their environment – hence consciousness.

I think this is a fairly good answer to the 'automaton theory,' and that James has not been wholly answered by the mechanists. Consciousness and feelings of pleasure and pain seem, on the showing of the biological facts, to have some survival value. Therefore, they must lead to actions which are advantageous; and therefore, they must have something to do with determining bodily movements.

I wish now to discuss behaviourism in the light of the automaton theory. The behaviourist is opposed to what he calls 'interactionism.' He, too, is inclined to think that consciousness effects nothing. He would not throw it out of all consideration if he thought that it did achieve results in the material world. In other words, the behaviourist, himself, though he objects to the parallelist theory in psychology, really presupposes it. His denunciation of the notion of consciousness can be pushed back to the old automaton theory, and that theory really presupposes the parallelist

view. If the behaviourist didn't have in the back of his head the notion that consciousness is a thing in itself, or a process dissociated from other processes, he would not raise the question as to how it is possible to get those two processes together. He would not discard consciousness if he did not believe, in the first place, unconsciously, that consciousness is a mysterious thing which intervenes in the process of behaviour.

Suppose, instead of regarding consciousness and the physiological processes as two things, one said, 'We will simply study the behaviour of organisms, and when we do, we probably shall find that some of them, human beings, sometimes behave *as if they knew what they were doing*.' In other words, consciousness, instead of being a stream outside of the process of physiological change, is simply a characteristic of some facts of organic behaviour. Instead of holding it to be something that goes on on another level and sometimes drops into our behaviour from the outside, why should we not say that it is simply a characteristic of some facts of organic behaviour?

Now, let us see if, with that view in mind, we can get anywhere. I think that all the confusion regarding consciousness is due to the fact that you cannot get anywhere on the parallelist or the old interactionist theory. I am not arguing for interactionism; I am suggesting that we give up entirely the way in which the problem has been stated. My belief is that behaviourism has here failed to state its own case. Let us see what case can be made for the view I just stated, that sometimes human beings seem to behave as if they were aware of what they were doing. A simple reflex may occur automatically. But is it possible there are some facts of human behaviour that, viewed purely from the outside as a behaviourist would view them, make it necessary for us to take into account the hypothesis that the person has consciousness, in order that we may give an adequate explanation of his behaviour? May we not have to assume

that the hypothesis of consciousness will fit some facts of behaviour better than any other?

It seems to me that a psychology without consciousness fails to take into account or to explain some of the more *complicated facts* of behaviour. I refer to the behaviour which seems to show *fore-knowledge* of events. I believe that if I can show that some facts of behaviour cannot be explained unless we assume that the person doing certain things has fore-knowledge of the results of his actions, then such behaviour (demanding fore-knowledge) means that consciousness enters into behaviour and makes a difference in the bodily movements of the organism.

I once heard a great behaviourist say, 'If consciousness can have anything to do with determining the movements of your body and therefore have any effect on behaviour, this world would be absolutely topsy-turvy. You might as well say that you can crook your finger at a billiard ball on a table and it would come to you.' If consciousness can, as we would say, intervene from some *outside* world and cause a movement in my body which is a movement in the material world, and if that movement is not in some way determined by previous bodily movements, then your ideas get mixed up with the course of forces in the material world just as truly as if a billiard ball would roll to you if you crooked your finger at it.

But, you *can* make *some* physical bodies move to you by crooking your finger at them. You can crook your finger at a dog and he may come to you, and he is just as material an object as a billiard ball. What is the difference between the dog and the billiard ball? The difference is this: the billiard ball will not come to me because something outside it must furnish the energy which makes it move. But the dog may come to me because the dog furnishes *his own energy* when he moves.

Now, on any hypothesis, all organic response to stimulus is release of energy from within the organism. So here we

have a very great difference. One of these objects moves mechanically because it must get the energy by which it moves from outside itself; the other has that energy stored up in itself and will release it when it is stimulated in certain ways. I am not sure that the stimulus in all cases does not involve some kind of consciousness.

Is it possible that a man, organized as a dog is, so that he furnishes his own energy for his bodily movements, can make some bodily movements which are just as material as the dog's or the billiard ball's, yet can make such bodily movements as intervene in the processes of the environment around him so as to make one set of events happen rather than another? If he can, and if he knows what he is doing, then consciousness does have effect in the material world, though it may not intervene from without. What I am trying to say is that an organism like man may make a bodily movement, which *bodily movement* intervenes in the course of events, and that the bodily movement also may be a release of his own energy. It may be explainable only on the ground that when he released that energy and made that movement, he knew what the effects of the series of mechanical changes in his environment were going to be before they occurred.

Behaviourism says that mental life is response to stimulus. Stimulus was too simple a word and the behaviourists substituted the word 'situation.'

Now here is a situation around me this afternoon. It is Friday and I am to give a lecture to-night. I sit down to write the lecture. What am I doing? Am I responding to a situation that is really not present? Is there anything necessarily in the situation this afternoon in my library that can determine my behaviour in writing that lecture? Yes, I am in the habit of sitting there. If I sit at the table, I am likely to write a lecture. So habit does have something to do with it. But I don't write lectures merely because I have a habit of writing them. I also write lectures with this audience and this evening definitely in mind. That fact

is something which does not exist in my library. This audience, this evening, and this event are hours ahead. It is not possible to explain my sitting there writing that lecture on any other hypothesis than that I was partly responding to a *situation that did not exist* and could not exist until seven hours afterwards.

§ 4

KNOWLEDGE IMPLIES EFFECTIVE CONSCIOUSNESS OF SOME SORT

That is my point. My behaviour is a response not merely to the situation which is physically present here, but my behaviour is also in large measure a response to a situation that at that time did not exist in the material world, and could not have existed in the material world for seven hours afterwards. If an organism's behaviour can only be explained by taking into account the fact that its behaviour is a response to things which do not yet exist in the material world, and if one could not say that such behaviour was adequate behaviour unless he did take future events into account, then some sort of *awareness* or consciousness is necessary, if we are to give an account of much human conduct. If I did not know I was going to write this lecture and as I sat there scribbling, you asked me what I was doing, and I said, 'I have the habit,' you would say that my behaviour was *psychopathic*.

In fact, psychopathic behaviour in many of its phases is precisely characterized by the fact that an individual, automatically, mechanically performs habits in situations where such habits are irrelevant, because they are not adjustments to *future ends*. You must take into account the fact that human beings adjust themselves to and *foresee* future results before they occur. I do not think my behaviour brings into the natural world anything that is not there. It does not bring in any mysterious spook of consciousness. I bring

eight o'clock into the situation at *one o'clock*. Eight o'clock does not exist in the material world; nevertheless, I bring foreseen results of eight o'clock into the situation at one o'clock.

Now, an organism which can do that, can foresee future events, and you cannot explain its behaviour on any other basis than that such an organism is conscious. In other words, it is the deliberate, calculating, conscious foreseeing of something that does not exist in the world. A conscious being is making purely mechanical movements which set going a certain series of events which lead to a foreseen end. The movements which I make in writing are purely mechanical, and I suppose if one wanted to confine his attention to such facts, it is conceivable that he might trace a series straight through the material world, and would find that every step in that material world, every link in that whole series of causes and effects did have and was conditioned by its predecessor. But the curious thing is that even though there be a consistent series, something has manipulated that series at certain points where alternatives are possible, and in such a way that one possible series of events occurs rather than another.

What does the *solving of a problem* mean ? It means that you associate in your own thinking two or more factors in the world which have not been associated before. There may be nothing in either one of them considered in itself which necessarily demands that it should be associated with the other.

The other day a young man came into our office and wanted to talk to me. He had decided to become a medical student. He is now in college. He is very much interested in certain studies. All his tendencies, his habits, his mental interests would lead him to go on with those studies and he came in to ask me if I would help him solve a problem. It was whether, if he gave the time to attend certain outside lectures, he could get his college degree; and if he did not get his college degree

he wanted to know if he could enter a medical school. He was making a decision which would change his behaviour in the material world, because of some end which is four years hence. His behaviour is finally settled by a *calculation*. He calculates the amount of time that he must give each week to his college studies, and on the basis of that pure, mathematical calculation, plus an end which is yet four years out of existence, his behaviour on the night of those lectures is determined, because he will be at home studying. You cannot explain that man's absence from those lectures, taking the whole situation into account, on any other theory than that his choice of means was determined, if you want to put it that way, by factors which do not yet exist in the material world, but which will exist, and that he gives deliberate, conscious, rational attention to those factors. I do not see how, therefore, you can explain the great part of human behaviour unless you take into account the fact that we are sometimes reacting to situations which have absent stimuli in them, and some of these absent stimuli are not merely in the present situation, but are existing as futures which are foreseen.

I could go into this much farther and show that all I have said applies to *language habits* or sub-vocal talking, which Dr. Watson calls thinking, and show again that sub-vocal talking, or thinking, has absolutely no reason for existence if it is merely mumbling things we have learned in the past. Thinking has significance only if in some way it *orients* us to situations which we have to face in the future, if in some way it guides our behaviour now so that things which we want may occur and things which we do not want will not occur. This matter we discuss in the chapter on habit.

In the chapter on the Stream of Thought, in the large work on psychology by William James, *The Principles of Psychology*, the discussion is really about consciousness. James makes four or five propositions about it. He says, for instance, that our consciousness is a sort of stream, but I do not think he

means at all the parallelistic or interactionist point of view; he means what we have just talked about. He says, 'Every thought exists in some personal consciousness,' and 'Thought is always changing.' That, when James announced it, was a rather revolutionary idea. Every thought exists in some head. Consciousness is personal. There are *no impersonal thoughts*. There is *no sharing* of thoughts. There are no thoughts in books. There are no thoughts in institutions. There are no thoughts in traditions. Thoughts exist only where they are thought, in individual heads. There is *no communication* of ideas. Thoughts do not jump out of my head and into yours when I am talking.

Hence there can be *no collective mind* or *group mind*. If this is true, what we have in books is only little symbols suggesting cerebral processes, which in some way excite thoughts in us as individuals. There can be no two people who have the same thought. Absolute pluralism and individualism is the case.

What we call society is not a thing, not a spiritual structure, not a combination of thoughts and principles and ideas. It is nothing in the world but our habits of behaving together, and there are no everlasting truths, no eternal verities, but situations that have to be met in a certain way.

'Secondly, consciousness is always changing,' says James. You never get the same thought twice. We think we do; we talk about getting an idea and keeping our ideas, as if we could hold them through life. Every successive thought about the same object is thought in a modified brain with a modified experience. It is thought in different connections and is a different thought. Again, there are no permanently existing truths, no permanently existing ideas for us. They have to be recreated all the time. When we remember things, we are not storing thoughts up as a postmaster might put letters in a pigeon-hole of a post-office, to pull them out when somebody comes and gives the right name. Ideas are not stored up in memory. Ideas are functions of our nervous

organizations, which are stimulated just as behaviourists would say they are. But they are always different and new, and our whole life is everlastingly irreducible to mechanical formulæ.

Then, again, James says, 'Thought is continuous.' Your thought always couples on to your previous thought, and by some strange fact never gets coupled to anybody else's previous thought. You wake up in the morning and your thought comes to the same stream that you were in when you went to sleep. You hear a crash of thunder, but nevertheless that crash couples itself on to the previous silence. James gave us a psychological truth which I think has much to do with all thinking. 'The objects of the world are discontinuous.' They are cut apart; moving all about. Our thought seems to unite them for certain purposes. James says, 'We have a feeling of "if" and a feeling of "and" and a feeling of "wherefore" and "why" and an intention to say something,' all of which means that about every one of our thoughts is a *fringe* which makes it move on to the next thought. The stream of our life is a continuous flow, and perhaps this is where we get the sense of personal identity which the old philosopher sought in abstract principles.

Finally, 'our thought is more concerned about some parts of its object than it is about others, or *consciousness is partial*.' We are not concerned about the whole situation. In a whole object before us, we are interested only in some aspects of it. 'And, therefore, consciousness,' says James, 'makes us interested spectators in the game of life.' Its function is to *select* and to choose.

Consciousness, therefore, is a fact of the organism's behaviour and has to do with *interest*. Because we can feel pleasure and pain we are more concerned about some aspects of the world than others. It is important, biologically, that such should be the case. If we were equally interested in all things, we could not survive. We have to pursue the lines of our interest, because they are on the whole the lines of

our survival and of our welfare. An organism therefore seems to be equipped with consciousness, biologically, as a method of avoiding the things which injure it and of seeking the things which are conducive to its welfare. In other words, consciousness has survival value. If so, that is an empirical and scientific fact and should be taken into account in psychology.

§ 5

Let us sum up, in conclusion, what I have said. Consciousness is an important problem in psychology. My belief is that the whole mechanistic theory sinks or swims, lives or dies, in regard to this very problem. I am making a direct challenge to mechanism in psychology. Behaviourism does not have to be mechanistic and men do not become mechanists because they are behaviourists. If a man is a mechanist in psychology, it is because he wants to be so for reasons that have nothing to do with psychology.

On the whole, then, there are three views which concern us. There is the introspectionist view, according to which consciousness is the subject matter of the study of psychology. It exists out of and above the material world; it is another kind of being which has been strangely coupled, every element of it, with an accompanying bodily movement or brain state. According to this theory the subject matter for psychological study is the analysis and investigation of this supposed higher thing, consciousness. I have tried to show that that is a wrong approach to the subject, and I should agree with the behaviourists and say that the introspective method is a survival of a pre-scientific age – a point of view that came before we knew what we now know about physiology and biology. It involves either mechanical determination or a metaphysical 'divine harmony' between thoughts and brain states.

The second view which we have tried to discuss is the

Behaviourist view, which affects to leave consciousness out and explain bodily movements merely as response to stimuli. We have tried to say that it is perfectly correct as a scientific method to take an absolutely objective view of human behaviour. We would not, any more than a behaviourist, wish to spend our time in the introspection of a so-called mysterious thing called consciousness, spelled with a capital 'C.' We would agree with the behaviourists on that point, but we would say that it is impossible to explain purely behaviouristically and objectively some facts of human behaviour *unless you take into account* the fact that that organism at certain moments is reacting to factors that are not in existence in the present material world, but that are foreseen as existing in the material world in some future moment of time.

Dewey puts the case very clearly, when he says that the old view of consciousness, spelled with a capital 'C,' was just as foolish, whether you take a negative attitude toward it as does the behaviourist, or a positive attitude. Consciousness is a process of the convergence of elements that exist on the same level. A mind comes into existence in its positive relation to environment. Dewey says, we do not sit in our environment passive, but we are active agents in it. Therefore, mind comes into existence when the activity of an organism upon its environment shows that such action has been done with *foresight of ends*. The difference between activity with foresight of ends and that which lacks it, is the difference between intelligence and servitude.

It seems to me one would have to go so far as to deny the very existence of organic action, if, in the interest of mechanism, he were to say that this world is so organized that an animal, conscious of pleasure and pain, cannot set going certain bodily movements that make for its pleasure and avoid pain. In other words, that the animal, to all practical intents and purposes, has not a choice. If it has, it is altogether conceivable that an animal like a human

being, having choice, can, if it foresees future events, set going other, purely mechanical, material things which reach to a certain future. Then the futures of men are not wholly and mechanically determined futures. Alternative and choice are the basis of mental life. I do not see how anybody can write a psychology, take in all the facts of human behaviour, treat them fairly, and ignore the fact that man is a choosing animal.

CHAPTER SIX

THE FATALITY OF HABITS

§ 1

THE IMPORTANCE OF HABITS

If the old saying that we are creatures of habit means that we are merely *creations* or victims of our habits, the saying is a half-truth. I wish to show in this chapter that we are also, at least to an extent which is psychologically important, creators of our habits. To that extent, I suppose it should be said we are creators of ourselves. We are in large measure what our habits are. Aside from the purely instinctive and native endowment of man, the whole mental life of every one of us has to be achieved.

A few years ago psychologists were inclined to give more importance to instinct than they do to-day. It is seen now that even *instinct patterns*, that is, the modes of response which an individual inherits, very soon become overlaid with acquired modes of response, and acquired modes of response are habits. Undoubtedly, we come into this world with varying types of inheritance. Our very intellectual differences in the end amount to an hereditary difference in acquiring and retaining habits. James says that when we look on living creatures from the outward point of view, (and this certainly applies to mankind), one of the first things that strikes us is that they are bundles of habits. Watson says the hereditary pattern acts fade into insignificance so far as concerns their number and complexity. He also says that in acquired activity one and the same object can call forth from an educated man literally hundreds of different actions, depending upon slight differences of setting or upon his needs of the moment. He bids us think of the number of activities that can be called out from one and the same individual by a piece of timber, leather, stone, marble or metal. Notice that the infant has very few responses to these things. About all it can do with an object is to clutch it, try to put it into its

mouth, turn it over, look at it, and throw it down. The difference between the infant and the educated man is the difference in the achievement of habits. Dewey says that our habits are our wills. He says that the medium of habit filters all the material that reaches our perception and thought. 'Reason pure of all information from prior habit is a fiction. . . . To be able to single out a definity of sensory element in any field is evidence of a high degree of previous training, that is, of well-formed habits. . . . Only the men whose habits are already good can know what the good is. . . . The essence of habit is an acquired predisposition to ways or modes of response, not to particular acts except as under special conditions. This expresses a way of behaviour. Habit means special sensitiveness or accessibility to certain classes of stimuli, standing predilections and aversions, rather than bare recurrences of specific acts. It means will.'

In other words, Dewey means that habit is a developed tendency to act in certain directions. This, of course, is just what will is. So, in the psychological sense, we are to-day chiefly the habit tendencies which we have acquired. The difference between normal and abnormal mental life is really a matter of habits. It would be quite correct to say that neurotic behaviour, and all the forms of mental maladjustment, are really due to the fact that certain individuals have developed habits which are harmful to themselves and others. So you see habits of thought are just as important as habits of action; probably more so. Show me how a man habitually thinks and I can tell to an extent what he will do in a given situation.

We should add further, that society itself consists of habits, primarily. People sometimes think of society as a mysterious thing-in-itself or a superpersonal being. Society may be well defined as the sum-total of our habits of behaving together. What are all the customs, institutions and traditions which go to make up society but habits? Many of these habits were developed thousands of years ago, and they were taught by

elders to their descendants for many generations. Hence, one becomes civilized when he has learned certain habits. Education is not merely giving people information. *Education is the formation of those habits which enable an individual to react adequately to real situations.*

So important then is habit that many writers cannot resist preaching or moralizing about the subject to some degree. James, in the famous chapter on Habit in the *Principles of Psychology*, was unable to resist this temptation to adorn his tale with a moral. This was excusable on James's part, because he was a teacher of youth and was deeply concerned about developing among his students habits of study. Our interest, however, is to understand human nature. We wish to know if man is merely the sum-total of what he has learned, and if in learning he must be passive in the grip of his environment. The subject of habit is treated by Watson in two ways: *Acquiring* bodily habits or *learning*, and the *retention* of bodily habits or *memory*.

§ 2

HABIT AND THE PSYCHOLOGY OF LEARNING

Learning is of all kinds. But whether one learns to play a game, to walk, or to talk, or to think, it is nothing other than habit formation. Woodworth and others give us some insight into different kinds of learning and habit formation. There is the learning which is merely the *strengthening of reflex*. Watson says that in habit formation no new movements are required. There are enough present at birth to combine into complex unitary acts. The new or learned element in habit is the tying together or integration of separate movements in such a way as to produce a new unitary act. Woodworth gives various illustrations as to how a simple reflex movement may be improved or strengthened by learning. He says that if grains are thrown before a chick one day old, it

will instinctively strike at them and seize them with its bill. But its aim is so poor and uncertain at first that it only gets one-fifth of the grains that it strikes at. On the second day it is able to get half, and after two or three days it is able to get three-fourths. After ten days of practice, the little chick is able to get 85 per cent., and that is the limit of its perfection. It apparently can learn to do no better than this.

A similar illustration of learning among humans is given by Watson, in his account of the way in which people learn to shoot with a bow and arrow. He says that in one group studied, twenty persons were selected. The arrow was shot at a target four feet in diameter and about forty yards away. The average of the first round of twenty shots was 56·9 inches from the bull's-eye. After 360 shots were given the average was 27·1 inches. He says the process of learning might have gone on until the average would be about 11 inches after a few more shots. Beyond that, only the exceptional person could go. The interesting thing about this learning process is that the improvement is very rapid at first; then there follows a long period when additional practice does not seem to bring improvement. After this, there may be other periods of improvement, each followed by a static period. These static periods in which improvement does not occur are called *plateaux*. There are also shorter periods of improvement which are called resting-places.

Now people seem to differ somewhat in respect to these plateaux or levels of learning which they reach. Some people may improve very rapidly, and reach a plateau on which they seem to be fixed for a long time. Others may improve more slowly at first but reach a plateau that is really a higher level of achievement, though they reach it later. In both cases, undoubtedly, under special conditions further improvement would be possible. But it would probably be due to formation of *collateral* and *new habits* which assisted earlier ones (I will explain these habits later), rather than to a strengthening or perfecting of the original reflex movements. I think if you

will study yourself, you will see that you reach one of these plateaux in some kinds of learning much more easily than you will in others. At least, I find that to be so myself. In trying to learn to play golf, I reached a certain score very early, and after that was unable to improve upon it. The same is true in my case in learning to use the typewriter. Yet strangely enough with much less practice I developed a greater degree of proficiency in the use of an axe or rifle. Just why such differences occur I do not know, but they do occur in the learning processes of all of us.

There are some things that are apparently not our game. Perhaps we should be conserving our energies and expending them to greater advantage, if in some way we could learn what is our game and what is not. A group of psychologists who have sought to put the science at the service of industry have tried working upon this matter. It has some value for vocational guidance.

Another type of learning or habit formation would consist in *simplifying movements* so that waste motions were cut out. If you watch a person who performs any manipulation skilfully, you will see that he does it with much less waste motion than does the unskilled. Notice the child learning to walk, and you will see an illustration of this. A very common illustration is to be found in watching people learning to swim. How much more effort a new swimmer puts forth in learning to keep afloat than he really needs! The infant learning to use its hands makes all sorts of random movements, and its learning may be said to consist of the elimination of the unnecessary motions and the co-ordination of the others into certain patterns or series of movements.

Again, learning consists in the fact that a reflex response may come to be *attached to a new stimulus*, one that does not naturally arouse it. The substitute response of this nature is the same as the *conditioned reflex* which we have noticed before. Watson says that this is the way in which most people learn to be afraid of objects. He says that the only tendencies to fear

that he has been able to detect in small children were when the child is dropped, and when there is a sudden loud noise. Now if a rabbit or a white mouse is given the child, the child at first shows no fear, but if a loud rasping noise is made at the same time the child touches the furry animal, the child will associate the fear of the noise with the sight of the rabbit in such a way that subsequently it will cry with fear whenever it sees the rabbit. This, of course, is an example of the same thing which we referred to in an earlier chapter, when we were discussing Pawlov's experiment with conditioned reflexes in the dog. You will remember the instance of the saliva and the bell. When the food was shown the hungry dog and the bell was rung at the same time, the dog finally would secrete saliva upon hearing the bell without seeing the food. A very large part of all our learning consists in the establishment of conditioned reflexes of this sort. Some systems of reflexes may be very complicated, such as learning of a trade or profession. Woodworth gives a few of the simpler *conditioned* reflexes in the training of animals. There is, for instance, the 'signal experiment.' A rat is placed in a box and there are, let us say, two passages leading out of the box, one of which contains food. The rat will explore the box for a while, and finally learn to go straight to the passage containing the food. Here he simply learns to eliminate unnecessary movements. But now let the experimenter place at the entrance of this passage containing the food, a yellow card. For a long time the rat does not notice the card at all. Normally I suppose he never would associate the card with the food. Now let the experimenter change the card and the food to another passage. The rat is perplexed, but after many trials he learns to enter at once, in search of food, the passage at the entrance of which the yellow card is placed. This is a conditioning of the reflex.

There is also used in the training of animals the '*maze experiment*.' Woodworth says that the rat is a favourite subject for this experiment, but that fishes and even crabs have mastered simple mazes. The maze is arranged as a labyrinth,

the passage through which is rather difficult to find. Watson gives us the learning curve of the rat in the maze. At the first trial, the rat succeeds in getting out in 29 minutes; at the second in 11; the fourth in 4; the ninth in 2; the twentieth in 1, after which it always required about the same length of time. Woodworth shows in comparing animal learning to human learning that a rat will find its way through a maze after 53 errors; a child, 35; and a blindfolded human adult, 10. Animals may be trained also by the use of a puzzle box and other experiments.

The chimpanzee, according to Woodworth, appears to be the only animal which can learn by *observation*. In other cases, if a trained animal is put in the puzzle box with an untrained one, the untrained one does not seem to learn the trick of getting out by watching the trained one. Even monkeys, which are supposed to have a high order of teachability and are popularly supposed to have 'an instinct for imitation,' do not seem to learn in this way. Woodworth, however, quotes experiments made with the chimpanzee, which seem to indicate that this animal, like man, is an exception. A chimpanzee was taught to secure pieces of banana which were put in a tube by pushing them out with a stick. An untrained chimpanzee was then permitted to watch this animal perform the trick, and when given the tube, immediately reached for the stick and pushed out the piece of banana. The ability to *learn by observation* vastly *accelerates* the process. But even so the learning consists in the strengthening of reflexes, the simplification of movements and the development of substitute responses or conditioned reflexes.

James reduced habit to a strictly physiological basis, saying that the 'moment one tries to define what habit is, one is led to the fundamental properties of matter. The laws of nature are nothing but the immutable habits which the different elementary sorts of matter follow in their actions and reactions upon each other. In the organic world, however, habits are more variable than this.' . . . So that 'the phenomena of

habit in living beings are due to the plasticity of the organic materials of which their bodies are composed.' . . . 'If habits are due to the plasticity of materials of outward agents, we can immediately see to what outward influences, if to any, the brain matter is plastic.' As the brain is carefully shut off from the direct effects of the outer world, such as mechanical pressure, changes of light and temperature, the only impressions that can be made upon it are through the blood and through the afferent nerves which enter and end in the brain. These afferent nerves bear currents of stimulus of some sort, and as James says, these impulses in most cases find their way out in some activity. In getting out they leave their traces in the paths which they make. The only thing they can do is to deepen old paths or to make new ones, and the whole plasticity of the brain sums itself up in two words, when we call it an organ in which currents pouring in from the sense organs make with extreme facility paths which do not easily disappear. Perhaps this over-emphasizes the element of fatality. But the problem is how far habit shows that man is merely the *product of his environment*. Is the learning, or habit formation, through which one comes to be what he is in mature life – effective or ineffective, intelligent or unintelligent, normal or abnormal – is our *destiny*, in a word, the result of environmental forces in which man has merely a passive rôle?

§ 3

DOES HABIT MAKE US MERELY THE PRODUCTS OF OUR ENVIRONMENT?

The habits which apparently must be the product of the environment would be those which are formed involuntarily. I refer to those mechanisms and fixations which make up the unconscious. It would appear that the individual in the formation of associations and of various unconscious move-

ments exercises no choice in the matter. Yet, Freud has shown that each of these unconscious habits has a meaning and that its meaning is *teleological* – that is, it exists for a purpose, even though that purpose is not conscious. I call such habits *collateral* habits. They are often the results of other habits which have been consciously formed. Many of them seem to be collateral results of our moral education. Moral training belongs to the realm of habit formation, like all learning. It is of the nature of the conditioned reflex. Now on purely physiological grounds, the question arises what becomes of that which is left out of an original reflex, when a response other than that which is the natural one is substituted, or when an individual learns, as does Pawlov's dog, to respond to a stimulus which has been deliberately implanted in a certain reflex movement, from without? Is it not conceivable that the old reflex is still there and is lighted up at least in some incipient manner? If so, then it must exist in a repressed condition. So that habit formation is a phase of what we saw, when we were discussing his work, Freud calls 'repression.' Perhaps our unconscious consists primarily of these broken-off ends of reflex arcs.

We are now concerned with the original tendencies which have been repressed by the conditional processes of moral education. When the child strikes its thumb with a hammer it will howl quite spontaneously. But a man suffering in the same way is likely merely to mutter swear-words. If people get in the way of a child, it is likely to try to push them aside. The trained and civilized adult, when he finds himself in a crowd, is likely merely to philosophize, or to think about the subject of birth-control. When a savage sees food, he goes and takes it. A civilized man enters upon a long process of labour for his living, or he may dream of a 'return to nature,' or entertain utopian ideals of an imaginary world in which there is enough for all without undue labour. Similarly many repressions are caused by our education concerning sex. This is quite necessary, for the cave-man is out of place in a civilized

community. But, as we saw, the repressed erotic impulses which otherwise would be unconditioned responses to stimulus, still have their traces in our organism. Many of these repressed impulses are themselves organized into habit formations of one kind or another. Some are directed toward socially acceptable goals and are, as psycho-analysts say, 'sublimated.' Others are organized into all sorts of 'fixations' and 'compulsions.' The technique of psycho-analysis consists very largely of revealing to the patient the meaning of such unconscious habits.

Dr. A. A. Brill sends me the report of a case, which I have published elsewhere, that illustrates how certain of these habits grew up. A young woman has a curious habit concerning jewellery. She dislikes to wear any jewellery whatever. On an occasion when she does wear a ring or a necklace, she finds that she repeatedly drops it on the floor, and often has to spend much time hunting for it. She also has the annoying habit of counting up to a hundred and then in 25's. The analysis reveals the fact that this whole system of undesirable habits had its origin in an incident that had to do with her mother. She wished very much at one time to wear a valuable necklace which belonged to her mother. Her mother refused and told her that she could have it when she was 100 years old and her mother dead, or when she herself had a husband to buy her a necklace. Now there is nothing in this situation in itself which, as an environmental fact, would cause these particular habits to appear. Another person might dispose of her repressed psychic impulses quite differently, so that, while the environment provides the occasion for the formation of certain collateral habits, *something in the individual himself* must contribute to the formation of a specific habit, good or bad. This something is probably determined by the individual's entire inner and secret past thought about himself. Much of our ceremonialism, both psychopathological and social, as well as religious, consists of such habits. The function of ceremonialism in compulsion neurosis has

been shown to be the wish to purify the psyche, to defend it against certain unacceptable tendencies in itself. Hence, 'taboo' habits are established, none of which could ever be predicted; all of which can be shown to be serving a certain purpose which arose in the individual's past, and hence, the individual, even in these forms of purely automatic behaviour, is active rather than passive in his relations to his environment.

This active attitude toward his environment is even more effective when we consider the habits which are formed *voluntarily*. Of course, in the psychological laboratory habits may be formed in animals and people which, though conscious, are involuntary. It is a pure assumption to say that *all* habits in daily life are formed in this way. We do seem to be able deliberately to acquire certain habits which we wish to cultivate, to put ourselves in situations which are conducive to certain kinds of learning, and having done so, to *co-operate* more or less vigorously in the learning processes. James made much of this fact in the famous chapter on Habit referred to above. He tells students how to proceed with the learning process in such a way that they may co-operate most effectively in the formation of desirable habits. He says it is important to take advantage of certain periods in our own development when habits may be easily formed. Just as there is a time when a child learns most naturally to speak or walk, so there is a time when it is easiest to learn a language or a trade. People who attempt to learn music after they have reached a certain age never succeed in becoming virtuosos. So James says most of our mannerisms, our professional habits, idiosyncrasies in the matter of dress, our daily preferences, become fairly definitely fixed before we are twenty-five. Again, he says that one seeking to form certain habits should make his nervous system his ally. He should make the desired behaviour as automatic as possible by seizing as many opportunities as he can on which to perform the desired action, and he should suffer no exceptions until the habit

becomes automatic. An illustration of this was given me recently by a famous linguist, who learned Spanish in a very few weeks. His recipe for learning a language is: Put yourself in a community which speaks that language; get a teacher and start talking and writing it; and for six weeks do not permit yourself to speak a word of any other language. James further suggests that one seeking to form a habit, should launch himself as vigorously as possible into it, and perform a little gratuitous exercise of it every day.

§ 4

'SUPER HABITS'

Now the point of all this is that some habits may be *deliberately* acquired; that to learn we must *make an effort;* and that there is a place in such learning for choice. What habits we are to acquire, and whether we shall co-operate with our environment or withhold that co-operation, seems to rest largely with ourselves. To deny this would be to enter into metaphysics. So that we may sum up this portion of the discussion with the statement that in the formation of habits man is *not wholly* passive in the grip of his environment but, at least so far as some habits are concerned, much depends upon himself.

I wish now to discuss a question which has great importance in the consideration of habits, and that is this: How, on the basis of habit, which is the stereotyping and the fixation of behaviour in certain acquired patterns, can one meet *new situations*? Notice that we have agreed with the Behaviourists that all the patterns which are not native and instructive are acquired forms of behaviour. Are we then merely the *sum-total* of what we have learned, or is it possible in our behaviour to think originally about anything?

Watson says there are two kinds of habits, *explicit* bodily habits and *implicit* bodily habits. It is enough to say that by

explicit bodily habits he means those movements of our organisms which can be observed by an outside observer, and by implicit habits he means those which are so delicate and difficult to observe that they would pass unnoticed. Chief among the latter he puts sub-vocal talking or thinking. Thinking, to Watson, is simply the formation of implicit language habits. Let us glance at both the explicit and implicit types of habits, to see if one is really a victim of either. For instance, the learning of a trade, requiring skill, would all be explicit habit, and there is a sense in which Dr. Watson is correct when he says that fundamentally thinking is no different from any other bodily habit such, for instance, as playing tennis or swimming.

Woodworth, in discussing the explicit bodily habits, has something interesting to say about learning telegraphy. It was found that individuals reach a certain plateau or degree of skill with practice after a period of training, and that so long as the effort continues merely to strengthen and perfect the reflex movements as such, there is very little increase in speed even after tremendous effort in practice. But he says that with some individuals there appears quite suddenly an enormous increase in speed and efficiency. This higher plateau is not reached by practice, but is really attained by the unconscious formation of *new habits*. The telegraphist begins to think no longer in specific movements nor even in terms of letters, but he develops a habit of thinking in terms of words or sometimes whole sentences. This latter habit seems to telescope or short-cut his reflex patterns in such a way that there is a great difference between the telegraphist who uses this latter method and one who attempts to attain speed and skill merely by practice, a difference which is like that which exists between the scholar and the person who in reading has to spell out every word. This latter habit I call a *super-habit*. It always appears in some form or other where unusual skill is attained. It is something *original* on the part of the learner, something which has not come about merely by practice.

It is said that Kreisler, in memorizing a sonata, has developed this super-habit to such a degree that he will quietly sit down and read through the whole piece before he ever touches his violin, and then will play the sonata through by memory. It is this sort of habit formation, something which is not learned from without, that constitutes freedom over one's technique and gives the highest skill.

Now, are there similar super-habits in the implicit bodily movements or sub-vocal talking? I think there are, and that thinking consists in something *more than merely retaining or repeating* what we have been taught. Just as the moment comes to the telegraphist when he adds new patterns to the process of mere muscular co-ordination, so in thinking, any degree of intellectual freedom, or 'thinking for oneself,' consists in the formation of such habits. Probably the greatest difference among men is this difference in habits of thought. There are some minds which behave merely like the mechanic who, having learned his trade in a certain way, never can function in any other. Recently a student raised the question whether or not a squirrel burying nuts was using intelligence. My answer was no, because the squirrel would try to bury nuts on a wooden floor if he were taken off the ground. Now there are minds which behave in just the same way as does the squirrel. We should all behave that way if our mental habits consisted merely in performing the functions which we had been taught. There are many persons who practice medicine and law in this way. The people who vote for a political party because their fathers were members of a certain party, people whose moral life never rises above mere convention, and people whose religious life consists merely in repeating dogmas which they have been taught in childhood, are all people of this type.

Now the difficulty with this type is that, like the squirrel and for that matter like every neurotic, 'the total reintegration' of the habit pattern frequently fails to bring them into effective relationships with the environment. The squirrel

would be all right if he were always kept in the park, but his habit of burying nuts is irrelevant when he is placed on the wooden floor. So men with squirrel minds, living in what is for us a continuously changing environment, are persons whose behaviour is for the most part irrelevant. So in their thinking, men of this type of mind most commonly retain old beliefs long after they have ceased to apply to real situations, and most of their gestures and compulsive movements are motivated by considerations that are quite irrelevant to the situations in which behaviour is demanded of them.

What is it then that enables some men to meet new situations in new ways, if not the formation of the super-habits to which I have referred? Earlier in this lecture I mentioned the story quoted by Woodworth of the chimpanzee watching a trained member of his species get the piece of banana out of a tube with a stick. Woodworth called this learning through observation. This is probably too general a term. But it means the ability to learn, to be taught something, not merely by long practice, but by *situations which present themselves at the time*. What we call observation consists first in an act of inhibition. The observing mind holds a habit pattern in check until it is released by just the right and appropriate situation. It has the habit of looking into situations to see what elements they contain. This habit has been called analysis. Perhaps when he does respond, he will respond in a way which he has learned. That is, he may give a type of response which is the appropriate one, but which he has learned to give to another sort of situation, and which he gives now because, holding the original habit in check, he has had time to see that the situation before him, once analysed, contains as its significant element something which is for practical purposes similar to, and may be identified with, another thing. At first he may not have noticed at all that the situation contained this other thing, but it is a great advantage when one learns to behave toward one thing as if it were something else.

There is, for instance, the often-repeated story of Isaac Newton who, it is said, first thought of the law of gravitation when he saw an apple falling. In other words, what Newton's mind does is something like this: He says the apple is like the moon, and like the moon in one respect, and that is that they are each attracted to the earth directly as to their mass and inversely as to the square of the distance between them and the earth. This is an amazing likeness, and one which would never occur to a person who had formed the habit of thinking of apples in only one way. Newton thinks of the apple in a new way. It is like the moon. Yet the apple is like the moon in many respects, all others of which are significant for this purpose. Both are round; both have a part in the literature of love-stories; both may be overhead. There is nothing in either the apple or the moon which in itself necessitates their being compared in the way that Newton compared them. The ability to make such a comparison was possible only because Newton had developed the super-habits of withholding action in a situation until he had analysed out the relevant or significant element. Once the significant element is seen, one may behave toward it in the way that he has learned. That is, it is an advantage now to Newton to behave toward the moon as if it were an apple. *But to see that new and significant likeness is something which the environment itself will not teach men to do.* That requires sagacity; or as James once said, 'gumption.' It is, as I have indicated, a super-habit and therefore while Watson is probably correct in saying that thinking consists in implicit bodily habits, or sub-vocal talking, yet we see now that this sub-vocal talking is not parrot-like repetition of acquired information. It becomes *creative* thinking only where the habit of sagacity enables one to recognize a common element in things which were apparently dissimilar, and to enrich one's behaviour by behaving toward a new thing as if it were an old one, when such behaviour puts one in new and more effective relations with that particular thing. So much then

for habits. We are not merely the creatures of them. We are in part creators of them, and with them may become sometimes creators of new truths and new facts of human progress.

§ 5

MEMORY, OR THE RETENTION OF HABITS

So far we have talked about acquiring habits. I wish to say just a word about the retention of habits. Watson very ingeniously points out that the retention of bodily habits is *memory*. Memory, therefore, is not some mysterious faculty of the soul. It is, as he says, simply the fact that after a period of no practice in certain habits, the function is not lost but is retained as part of the individual's organization. Other behaviourists have defined memory as 'delayed responses to stimulus.' Much data has been gathered by experimental psychologists as to the number and kind of things that can be memorized. We do not need to go into this mass of data, for it is not relevant to our present study. The treatment of memory as retention of habits is a valuable point of view, and does much to get our psychology away from needless mysticism. Perhaps, too, it throws light upon the problems which so many people raise, of improving one's memory. The way to improve our memory would seem to be simply to learn our habits well – including the sub-vocal language habits.

James regards memory very largely as a bodily habit, though he does not use the word habit in this connection. He treats memory first as primary memory, and second as secondary memory or memory proper. What he says about primary memory would fit in with what behaviourists say about memory. He regards it basically as the property of living matter depending, like habit, upon the plasticity of living tissue. He says that all nerve currents must leave their traces and these, of course, once revived, constitute memory. Also, that because of its plasticity, the nervous system does

not change as rapidly as do the changes in stimuli in the environment. For instance, there are after-images which Professor Seashore has studied at some length. Then there is a curious haunting of our organisms by impressions after they have ceased to play upon us, as, for instance, the feeling one has after having been on a boat, or after a string has been tied round a finger and then has been removed. From these simple facts James moves on toward the more complicated ones, showing that so far as retentiveness is concerned it consists in this purely physiological fact. This he calls primary memory and this, so far as I can see, is as much as a behaviourist can say on the subject.

But James says that memory is more than this. It is not a mere calling up or living through again a certain incident. If we did that completely and simply, we should not even know that we are not living through the event for the first time. Remembering a thing means first that it is *associated with my past*, and second, that it is given a certain *locus* in that past; that is, the object of memory is imagined in the past and with the act of imagination there must go an *emotion of belief* that this particular incident really belongs to the associated past. Of course, the whole past is not recalled. It is reconstructed, and is associated very largely from the standpoint of the present so that the past has essentially a symbolic significance for us. The important thing in remembering, says James, is this matter of association, and also, this habit of associating things is an aid to the memory. Given two persons with the same primary retentiveness, he will remember best who thinks over his experience most, who, therefore, has the largest number of particular facts associated with any particular one.

This is roughly what I mean: to improve one's memory one simply must learn his habits well. So-called courses which are advertised to improve memory make it appear as if memory were a mysterious faculty to be exercised or a sort of spiritual baby to be wheeled out in the park so that it may keep well and grow stronger. All such ways of looking on

memory are pure nonsense and are based upon wrong psychology. Memory does not improve with exercise, for there is nothing to be exercised. Remembering is simply acquiring habits and acquiring them in such a way that they become a fixed part of our organization. Thus, neither in learning habits nor in retaining them are we the passive creatures of the past. Through all our habit formation and retention we are not perfecting and securing our hold upon any ideas which are stored up somewhere, but are organizing patterns of action in which there are retained significant elements all of which become instruments for living.

CHAPTER SEVEN

HUMAN NATURE AND INSTINCT

§ 1

The problem of instinct, like that of consciousness, is a controversial one for modern psychologists. This was not the case with the older philosophers. Instinct was conceived of as something quite the opposite of reason. Both instinct and reason were divine gifts, endowments which a benevolent Creator had showered upon mortal beings for the purpose of guiding them through life. Man, the highest work of His hand, He had equipped with reason in order that man might know Him, and that a few, at least, ultimately might share eternal glory with Him. Reason, however, was fallible and prone to error, and in the end faith was a better guide.

Instinct He had given to animals. It was a marvellous and mysterious thing, a proof of divine providence and of 'design' in the world. Men wondered at the behaviour of bees; at the accuracy with which they constructed honeycomb. They saw in the nest-making activity of birds, and in their migratory instincts, evidences of a cosmic plan and of a divine hand leading all living things in the way that they should go. How intricate and accurate many of the things that animals did appeared, and yet how little knowledge or calculation these creatures seemed to show! Surely a kind-hearted Deity in His plan of creation had taken the welfare of all these forms of life into account. The existence of instinct was utilized by older theologians, therefore, as a 'teleological' argument. To their minds it seemed to prove that in all things in nature there were evidences that the created world was the work of an over-ruling and all-comprehending intelligence.

§ 2

THE EFFECT OF EVOLUTIONISM UPON THEORIES OF INSTINCT

The evolutionism of the nineteenth century has completely changed this view. Teleology, or purpose, is no longer regarded as something universal and imposed upon nature from without, no longer a proof that there is somewhere a *deus ex machina*. In its place we have organic activity, response to stimulus, adaptation of concrete organisms to their environment, struggle for existence, and that interesting fact discovered by Darwin of the interdependence of species. Instinct, like all other phenomena of life, has been brought within the scope of organic evolution, and is regarded merely as a form of animal behaviour, a product of natural selection. Life is essentially active. Activity is as elemental as structure. In a sense we may say that structure is the effect of certain of life's activities. The structure of an organism at any time is but a cross-section of its process of growth, and just as organisms, according to Darwin, vary accidentally in respect to the inherited forms of their structure, by the same law of variation they differ congenitally and accidentally in their tendencies to behave. Just as those accidental advantages of structure give certain creatures a better opportunity to survive in the struggle for existence, and just as in the same struggle those organisms whose variations throw them out of harmony with the environment are killed off before maturity, so with the variations in native behaviour trends or instincts.

Instinct is not an endowment; *it is not the result of inherited habit*. An instinct is like a bodily organ, an accidental variation in the life process which has been preserved by the impersonal operation of natural selection. Because instinctive factors, like structural elements, are original accidents of birth or 'congenital variations,' they may be inherited, and the accumulation of such inheritance finally constitutes

the instinctive behaviour of a living species, animal or human.

Moreover, careful study discloses the fact that animals are not entirely the creatures of instinct. They, like ourselves, can learn. They develop habits, and would seem to show in much of their activity evidences of a certain crude reasoning. A young bird, for instance, even though it has inherited the instinct to fly, must yet learn to fly through a process which is as difficult for it as learning to talk and to walk are difficult for a human infant. You have doubtless many times been a witness of that educational process in the bird species, when the young fledgling first leaves the nest and the parents with a great clatter and much excitement are teaching it to fly. This learning process, according to many animal psychologists, is a necessary part of the education of a vast number of insects and of the lower, as well as higher animals.

It has also been discovered that man, instead of being the rational creature that earlier philosophers thought he was, is not at all governed by reason in the way that they imagined. One of the important discoveries of modern psychology is that man is not a very reasonable being. Man was found to have an enormous number of instincts. James says that the human being has more instincts than a monkey. It is said that while man has more instinctive trends than the lower animals, these instincts are by no means so perfectly organized in man, and therefore, while man does more things instinctively, he does none of them so well or correctly. Man's instinctive patterns are all over-laid and modified – 'conditioned,' as we saw in an earlier chapter, by habit, and by some degree of intelligent consideration. When James wrote his chapter on Instinct, he really did a revolutionary service for psychology. In showing that man is a less rational being than pre-evolutionary philosophers had imagined him to be, he was, without realizing it, preparing the way for Freud and other psychopathologists, who have shown us that human behaviour is to an enormous

extent unconsciously determined. While many Freudians still feel that this unconscious determination is rooted in our primal instincts such as sex, nutrition, self-preservation, and gregariousness, it is not necessary for us to conclude that such is wholly the case. These large terms used by Freudians are rather abstract, and it is doubtful if they represent anything more than the most incipient and highly modified survivals of what may have been originally instinctive trends. In the unconscious, instincts are so confused, inhibited and overlaid with repressive modifications, that it is, as we shall see, impossible to isolate any pure instinctive tendencies.

§ 3

THE RECENT OVER-EMPHASIS OF INSTINCT BY SOCIAL PSYCHOLOGISTS

However this may be, the emphasis upon instinct since James's day has been very great, especially among *social* psychologists. As one author said, once it was found that man was not a wholly reasonable being, 'it has rained instinct.' Scholars have tried to explain everything by instinct. They have felt that when they could say that any persistent and widespread human interest was an inherited disposition to do a certain thing, or in other words, an instinct, they were telling us something very significant and important about it. I think there is something tautological about this tendency in social psychology. I am not sure that we get very much new insight into parenthood, for instance, when one says that it is a manifestation of the 'parental instinct.' The same is true of religion, politics, sex, and industry. We need something much more specific than the attempt to reduce the main lines of human interest and activity to some broad general instinctive disposition.

Yet, Professor McDougall says, 'We may say, then, that directly or indirectly the instincts are the prime movers of

all human activity; by the conative or impulsive force of some instinct (or of some habit derived from an instinct), every train of thought, however cold and passionless it may seem, is borne along towards its end, and every bodily activity is initiated and sustained. The instinctive impulses determine the ends of all activities and supply the driving power by which all mental activities are sustained; and all the complex intellectual apparatus of the most highly developed mind is but a means towards these ends, is but the instrument by which these impulses seek their satisfaction, while pleasure and pain do but serve to guide them in their choice of the means.'

So there has been an attempt to explain almost everything human as a manifestation of some specific instinct. Ames and others try to explain religion as a combination of the instincts of sex, food, and gregariousness. Trotter has tried to explain almost the whole of civilization in terms of the 'instinct of the herd.' Others have tried to explain war as a simple expression of the 'instinct of pugnacity.' Freudians have sought to reduce everything to the instinct of sex. And Veblen, following McDougall, has tried to give us an account of the development of the economic interest in society in terms of the so-called 'instinct of workmanship.' As I have indicated, social psychology, with the exception of the few writers who seek to approach the subject from the standpoint of habits, as does Dewey in his book, *Human Nature and Conduct* (or as do Freud and a few others, from the standpoint of psycho-pathology), is almost obsessed with the concept of instinct. To my mind, at least, this concept has been so overworked and (in general) so confused that it has very little value any more. I do not see how it can serve us greatly either as an adequate account of individual or social behaviour, or as a criterion by which we may distinguish the normal from the abnormal.

§ 4

CONFUSION IN REGARD TO THE CONCEPT OF INSTINCT

Let us now notice some examples of this confusion. Firstly, there seems to be little agreement as to just what are the instincts in man; and secondly, there seems to be great difference of opinion as to the definition of instinct. James's list of instincts is rather extensive. It is probably the longest list there is. Here are some of the instincts which he finds: sneezing, snoring, sobbing, vomiting, hiccoughing, crying, laughing, starting, moving the limbs when tickled, touched or blown upon. These he calls the simpler reflex movements. Then there are sucking, biting, making grimaces, licking, spitting out, clasping, pointing, making noises, carrying things to the mouth, smiling, turning the head, sitting up, standing, locomotion, vocalization, imitation, rivalry, pugnacity, sympathy, hunting, fear, acquisitiveness, play, constructiveness, curiosity, secretiveness, cleanliness, modesty and shame, love, jealousy, parental love. It will be seen that in this list there is no clear distinction between instincts and emotions. Fear, jealousy, sympathy and many aspects of love, as well as shame and modesty, would seem to belong to the realm of feelings rather than of actions, and James says that an instinct is an inherited tendency to *act in a characteristic way*, while an inherited tendency to feel is characterized as emotion. Obviously, too, there must be a great difference between an instinct like parental love, which is very complicated and may dominate most of the behaviour of an individual throughout many years of his maturer life, and a simple instinct like sneezing or biting. Yet James does not seem to make it clear what this difference is or why such different things should be described under the same head.

Professor McDougall's list of instincts is somewhat different. Perhaps McDougall, more than any other contemporary

psychologist, is the exponent of the rôle that instinct plays in human behaviour. He has tried to classify the instincts, and in so doing he assumes that each instinct is somehow necessarily connected with a certain emotion, and that the two together constitute a 'disposition.' The emotion he calls the 'affect' of the instinct, by which he means the feeling side of it. There is, first, the instinct of flight with the accompanying emotion of fear; second, the instinct of repulsion and the emotion of disgust; third, the instinct of curiosity and the emotion of wonder; fourth, the instinct of pugnacity and the emotion of anger; fifth, the instinct of self-abasement and the negative self-feeling (sometimes called the feeling of self-depreciation); sixth, the instinct of self-assertion and the emotion of positive self-feeling (sometimes called egoism or the emotion of self-appreciation); eighth, the parent instinct and the tender emotion.

Then there are three instincts, according to McDougall, in which there are no definite inherited emotions. They are the instinct of reproduction, the gregarious instinct, and the instinct of constructiveness. This list of instincts, though very specific and almost uncritically accepted by many social psychologists, raises a good many questions. Curiosity, for instance, may be regarded as a phase of the intellect rather than as an inherited tendency to act. It may be questioned why McDougall leaves out such instincts as the hunting instinct and the homing instinct, which, according to Thorndike, are very important. So also the instinct of migration; and the instinct of collecting and hoarding which, according to many psychologists, is the basis of the ownership of property among men.

Again, one is impelled to question whether each of these so-called instincts is anything more than a pure abstraction. James says that a very common way of talking about these admirably definite tendencies to act (instincts), is by naming abstractly the purpose they serve, such as self-preservation or defence or the care for eggs and young. Thus, the animal

has an instinctive fear of death or love of life, or an instinct of self-preservation or an instinct of maternity, and the like. But this represents the animal as *obeying abstractions* which not once in a million cases is it possible it can have framed. The strict psychological way of interpreting the facts leads to far clearer results. *The actions we call instinctive all conform to the general reflex type.* They are called forth by determinate sensory stimuli in contact with the animal's body, or at a distance in his environment. . . . 'He acts in each case separately and simply, because he cannot help it. . . . Is each thing born fitted to some particular things and to them exclusively, as locks are fitted to their keys? Undoubtedly this must be believed to be so.' Here James would seem to be fairly close to the position which we shall shortly see as that of Dr. John B. Watson.

Whether or not Professor McDougall has substituted abstractions for these concrete responses in his classification of instincts, he seems at least to have done so in coupling with each instinct a certain emotion or 'affect.' It is open to question whether naturally our instincts and emotions are really coupled in this way. For instance, is the emotion of fear necessarily associated with the instinct of flight? Undoubtedly it is at times, but there seem to be many fears which have nothing to do with flight; in fact, the Freudians frequently say that this emotion is the result of inhibited sexuality, especially in anxiety dreams. Rivers points to the fact that fear is most intense when flight is impossible; and there are many cases when successful flight, instead of being associated with fear, carries with it a certain feeling of elation.

The same may be said of McDougall's coupling pugnacity with anger. Nietzsche showed that the most intense hatred may exist among the meek and apparently loving. He speaks of 'impotent revenge' and shows how it gives rise to certain ideals which he characterizes as 'weapons' of the meek. When we come to consider the parental instinct, is not the phrase,

the 'tender emotions,' altogether too general? Undoubtedly infants do make some such emotional appeal to normal adults, but certainly not always, even to their own parents. I should say that with the parental instinct, if there is such an instinct, as well as with other instincts, which McDougall has listed, there normally goes *not one* specific affect, but a very *large number of confused emotional states*.

A third psychologist, Rivers, to whom I referred earlier in the book, also gives a list of instincts which we should consider. Dr. W. H. R. Rivers, late of Cambridge University, was one of the most brilliant exponents of the newer school of social psychology in the country. He was an anthropologist, a doctor of medicine, and a psycho-analyst. Shortly before his death he wrote an extremely interesting book entitled *Instinct and the Unconscious*. In this book, as well as in his last book published since his recent death, he had something to say about instinct. It would seem that he does just what James argued one should not do. He classifies instincts under three heads : First, the instinct of *self-preservation*, under which he places nutrition, hunting, curiosity, and the danger group which consists of flight, aggression, manipulation, and immobility. Second, there are the instincts of the *continuance of the race*, under which he places the sex instinct and the parental instinct. Third, there are the instincts for the preservation or *cohesion of the group*, and under this instinct he places gregariousness, which is composed of suggestion, sympathy, intuition, and imitation. We will discuss this gregarious instinct later.

It should be noticed in passing that Rivers classes as instinctive such forms of action as curiosity, immobility, suggestion, sympathy, and imitation. It is clear that there is a difference between these forms of action and behaviour trends such as hunting and sex. Rivers' classification is highly arbitrary. Are there not suggestion and sympathy in sex as truly as in 'gregariousness'? And can the parental instinct with the outgrowth of family into the tribe be wholly separated from the

group instinct? Does curiosity belong to self-preservation any more than to our reaction to sexual objects and to society? And is not self-preservation so highly general and abstract that it means almost everything and, therefore, practically nothing?

It will be seen that among the writers quoted not only is the *classification* of instincts confused and open to question, but there is no clear *definition* as to what instinct really is. James seems to hold that instinctive acts are of the nature of specific responses, by which organisms are fitted to the facts of their environment, like keys to locks; that these responses are multitudinous, and that about the only generalization we can make is that 'every creature naturally loves its own ways.' McDougall classifies instincts according to the general *lines of activity and feeling* of which an organism is capable. And Rivers classifies instincts *teleologically*, that is, according to the *ends* that such activity serves, 'self-preservation,' 'reproduction' and 'cohesion of the group.'

Professor Hocking has recently called attention to the confusion of definition. He says, 'The common use of the term instinct is not embarrassed by the fact that its meaning is hybrid. It means a mode of behaviour and it also means a mode of interest, and for ordinary purposes the mixture of physical ingredients and mental ingredients makes no trouble and requires no explanation. But when a technical definition is sought such mixtures are no longer satisfactory; a concept must have a fixable character, not a dual personality. Yet the effort to reach a clear and distinct idea of instinct commonly results in a dilemma. When the definition does justice to all that instinct means in physical terms, it fails to fit what instinct means in mental terms, and vice-versa. When either side is securely nailed down, the other warps and refuses to fall into place.'

This will be easily seen if we note the different *definitions* of instinct which are current among psychologists. James says, 'Instinct is usually defined as a faculty of acting in

such a way as to produce certain ends without foresight of the ends and without previous education in the performance.' Notice that in this definition *knowledge or learning* plays no part. Bergson, however, says, 'If instinct is above all the faculty of using an organized natural instrument, it must involve *innate knowledge* (potential or unconscious, it is true) both of this instrument and of the object to which it is brought; instinct is, therefore, innate knowledge of a thing. . . . Instinct is sympathy.' It will be seen at once that this is a highly mystical concept of instinct.

McDougall's definition would seem to contain something of both of these points of view. He says, 'We may define an instinct as an inherited or innate psycho-physical disposition, which determines its possessor to perceive and to pay attention to objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner, or at least to experience an impulse to such action.' It will be seen that far from separating instinct either from intelligence, or from emotion and habit, McDougall's definition involves the necessity of assuming as part of instinct, *perception*, *emotion*, and *will*. Perhaps Dr. Watson has provided a way of escape from this confusion. Watson defines instinct as 'an inherited reaction pattern, the separate elements of which are organized in unstriped muscle tissue.'

§ 5

DR. JOHN B. WATSON'S STUDY OF INSTINCT

From this 'behaviourist point of view' the problem of instinct is not only one of instinct versus *intelligence*, but of instinct versus *habit*. This statement of the case would seem to give us justification for inquiring into the problem of how instinct differs from habit. What is the problem of instinct if

it is not that of learning what are the native and inherited traits of man, and what are the acquired traits? Acquired traits are not inheritable; they are modifiable by experience and training. As social customs, they constitute those habits which make up the bulk of our civilization and social order, our ethics and religion. In so far as these things are based upon acquired traits or habits they are modifiable, at least to some extent.

The question of instinct, therefore, has very practical significance for us because it involves the question, how much in our social as well as personal behaviour can be improved? Of course, those forms of response which are inherited, belong to the species precisely in the same way that its inherited bodily structure belongs to it. Therefore, these inherited modes of response or instincts, being part of the inheritance of the human species, will appear in all its normal members generation after generation, regardless of the amount of training the individuals in their lifetime may receive. They may be modified and repressed by social convention, but they cannot be trained out of the race. They are what men talk about when they speak of 'human nature,' and undoubtedly their existence must defeat the attempt at any forms of social advance which are in too great a conflict with them. How, then, are we to know what human nature is? Dr. Watson sought the answer to this problem in the careful observation of those modes of response which a baby brings with it when it comes into the world. All other modes of response must either be in themselves habits or must be habitual modifications of instincts.

Perhaps no one has so carefully observed the behaviour of small children as did Watson in the laboratory at Johns Hopkins. Almost every movement that hundreds of children made day after day throughout their first year was noted and recorded. At first most of the infant's movements were just random movements, which early in the life of the child come to be organized into more specific and useful ways of

behaviour. These co-ordinations are the early acquired modes of response. There are, however, certain reflexes which have an instinctive basis, such as turning the head, sucking, sneezing, crying, blinking, grasping, and the like. This grasping reflex is interesting because it is later lost. A small child only an hour old will support its weight for several minutes hanging by one hand. After a few days the child no longer has the ability to do this. And after the first few months, our author tells us, the instincts of a child are so modified by what it has learned, that the original patterns are no longer discernible. Watson says that most of the lists of instincts that appear in the writings of psychologists are really consolidations of instinct and habit.

The approach to this subject made by Watson has one singular advantage, and that is the suggestion that when discussing the existence of any particular instinct in man we should look for the *inherited reaction pattern*. Of course, there are instincts which appear so late in the life of the individual that it is impossible to say just what reaction patterns are inherited, as would be the case when we study small children. It is more than likely that when these inherited patterns do make their appearance late in life, as for instance the instinct of sex in adolescence or the so-called parental instinct, the individual has already acquired, before the appearance of the instinct, certain very definite habits regarding it.

Important as the subject of instinct is, one should learn from Dr. Watson to avoid the danger of assuming that there is a specific instinct for every persistent and general human interest or behaviour trend. As C. E. Ayres says, 'Instinct in man has been defined in terms as remote as possible from those that delineate the stereotyped reaction patterns of animals. "Instinctive impulses" determine not the character of the behaviour, but "the ends" of all activities, and supply the driving power by which all mental activities are sustained. This emphasis upon the "*end*" of the activity rather than upon the form of the act suggests as its accompaniment the

definition of instinct as "a disposition" which determines its possessor to perceive and to attend to an object of a certain class. . . . In short, instinct in man is his disposition to behave in whatever way he may behave. . . . If you conceive the end of urban life to be sociability, then you can classify it as "gregarious"; if you conceive it to be economic, then it is "acquisitive," or "proprietory" (or due to an instinct for unearned increment). In this sense the most solidly based of the human instincts is J. R. Kantor's "Instinct to die," for, as he points out, death is the "end" of all activity.'

While this criticism is perhaps a little facetious, there is a point in it. If you take any other than a behaviourist view of instinct, and think of instincts as *ends* rather than as *patterns*, then why not an instinct for mathematics, an instinct to look in a mirror, to talk about people behind their backs?

Let us consider some three or four of the so-called 'instincts' which psychologists, viewing the matter in this way, believe throw some light upon human behaviour. There is, for instance, the so-called instinct of 'acquisition,' or the instinct to acquire and hold property. Surely this is a very general human interest. But has man any such instinct as a pure and specific inherited element in his psychic life? Dr. W. H. R. Rivers believed that he had, though he thought that the instinct of acquisition could be modified to some extent. Perhaps the facts of kleptomania and of miserliness would indicate some sort of inherited pattern, since there is something rather stereotyped and uniform in the behaviour of most kleptomaniacs and of most misers. But kleptomania and miserliness are really psychopathic forms of behaviour and need further analysis. When we consider the patterns which men reveal in the normal acquisition of property, the many ways by which they hoard and save, we must see that patterns here are very diverse, and since they include almost the whole of our financial and industrial behaviour, they are acquired rather than inherited forms of response. If man, as seems to be the case, came out of the pre-human state

with his basic instinctive patterns already formed by evolution, it is doubtful if there could be any such instinct as that of acquisition, since property is a *social institution*, and came into the world many thousands of years after man's instinctive behaviour patterns had been evolved. Personally I can find very little that is helpful to the understanding of man's attitude toward property, when I read the words of those who would explain this human interest as merely a manifestation of the instinct of acquisition.

Again, there is the so-called 'gregarious instinct,' which most English and American social psychologists practically worship. Perhaps this instinct may exist in man to some small degree. We are companionable animals. But if we look for the *behaviour patterns* of gregariousness, I think we shall be led to the conclusion that it is impossible to draw the enormous inferences from this instinct which some social psychologists seem to draw. If we compare man to gregarious animals, we find that there are practically three behaviour patterns which characterize the herd instinct of the latter. There is first the pattern of huddling together; second, the tendency to run in the same direction; and third, the tendency to remain within sight of the other members of the group. All these patterns may exist in the social behaviour of man. But surely they would not in themselves give rise to the many conventions and restraints of civilization. They do not build institutions, nor do they give rise to public opinion; in fact, very few of the things which Trotter or McCurdy or Rivers would explain by this instinct have anything to do with it.

Rivers believed, as we saw above, that the herd instinct consists of suggestion, sympathy, and imitation. Suggestion can hardly be regarded as an instinctive thing. In fact, 'suggestion' has frequently been used by psychopathologists in a very mystical sense. Almost all we can say about it is that it is the *abstraction of attention* in such a manner that all ideas or impulses which are contrary to a certain definite one held

in mind are inhibited. We have no right to say that animals manifest suggestion. Sympathy, again, is an emotion, and 'imitation' probably does not exist at all. When animals behave similarly it is probably because they are very much alike, and happen to be in an environment which stimulates them in much the same way.

The normal forms of social behaviour are not original instinctive endowments. They consist, as Dewey said, of habits of mutual adjustment. We have to be social because there are so many of us and we are permanently in one another's environments – in one another's way. And it is necessary, if we are to adapt ourselves to an environment made up of other people, that we bring some degree of stability and predictability into our common behaviour. So much for the overworked instinct of gregariousness.

Another exaggeration of instinct is to be found in the discussion of the so-called 'instinct of workmanship,' such as that of Professor Veblen's book, which has this phrase as its title. If we keep in mind the fact that an instinct is an inherited mode of response of the pattern reaction type, then we must see that *man inherits no labour patterns*. A trade must be learned. It is a matter of habit-formation, and it is even doubtful if men have an inherited inclination to work. Personally I do not think we have. My own observation would rather confirm the notion that everybody has a natural interest to get out of work if he can. Not every one who loves 'Labour,' loves work. It is significant that none of the gods which humanity has created for itself have been imagined as working. Of course, it is said that Jehovah during the six days 'worked' – but he merely spoke or *thought* things into existence. Vulcan, the working god of the Greeks, was always regarded as ridiculous. Holy days like the Sabbath are days on which men are forbidden to work. The myths and legends of antiquity, as Patrick says, never picture folk-heroes as workers; they always picture them as adventurers, fighters, lovers, and loafers.

Finally, there is the so-called 'parental instinct.' It is obvious that whatever may be the inherited element in this instinct, there are so many patterns necessary to its operation, and by the time the adult individual reaches parenthood, his whole life is so much a matter of habit, that it is impossible to say how much of his behaviour is inherited and how much is acquired. All the manifold acts of courtship, of mating; all the ego interests that accompany the wish to be admired, and all the forms of protection and labour by which, during the period of infancy, the new generation is safeguarded and supported; all the activities of habituation and home-making, and all the adjustments which are necessary throughout the life of a married couple, would pertain to this so-called instinct. Clearly the psychological fallacy of lumping all these manifold activities together under the common term 'instinct of parenthood,' tells us precisely nothing.

So the attempt to discuss the subject of instinct in terms of the ends rather than of the patterns of behaviour tells us very little about human nature. In fact it assumes the very thing that it sets out to explain. If, however, we regard an instinct as an inherited pattern, we may be able, to some degree, to determine which are the basic facts of human nature, and which forms of activity are environmental, acquired, and modifiable. Moreover, once we are able to isolate the true patterns of an instinct, we may be able to discover which habit-modifications of that pattern are normal and wholesome adjustments to the environment, and which are psychopathic.

§ 6

THE CONTROL AND INHIBITION OF INSTINCTS

This leads us to the consideration of the control and inhibition of instincts. Obviously, if what we have said above is correct, instincts in man cannot operate in the automatic

and inevitable fashion that they do in animals. We live in a very complicated environment and among ever-changing situations. The unmodified appearance of any instinct in the presence of its appropriate stimulus would result in disaster for us, for such action would be like the performance of a habit in situations where, taken as a whole, such performance would be irrelevant. Rivers showed that the suppression of instinct is a basic fact in human and animal life. The famous Rivers-Head experiment, which I described in the second chapter, throws some light on this matter. You will remember, the nerves of Dr. Head's arms were cut in such a way that they were many months in healing and restoring their function. As the nerves began to heal, a stage was reached when a stimulus to Dr. Head's hand was felt over a much wider area of the surface of the skin than is normally the case. There was not only a greater diffusion, but there were also other factors which had not appeared in normal sensation. It seemed to Rivers and Head, therefore, that when the function of the nerves was restored to normal, something primal and original was *lost* or *repressed*. This primal general feeling tone they called *protopathic*, and the repression of it which came with complete healing they alled *epicritic* sensation, because this latter brought with it specific awareness and greater definiteness of feeling and of response.

What Rivers and Head found in sensations, they also discovered in bodily movements. Protopathic movements or response are random movements like those that characterize emotional excitement. They are not adaptive. They tend, if excited at all, to greater activity than the situation or stimulus normally requires. This latter type of behaviour, psychologists call the *all-or-none* principle. Finally, protopathic response is like protopathic sensation – spread over a very wide bodily area, resulting in the movement not of a definite organ, but of the *body as a whole*. This they called *mass reaction*. Rivers says that protopathic behaviour is the

original form of response to stimulus, and constitutes the basic element in instinct.

There are no patterns in the protopathic elements of instinct. Neither is the protopathic directed toward any ends. It is simply a universal urge or drive, and when it is dissociated from one pattern, it will assume others. Here probably we have a psycho-physical basis of what Freudians call the 'unconscious' – also perhaps the original element in what Woodworth calls the 'drive.' As living forms evolved, the epicritic more and more suppressed the original protopathic quality of behaviour. Otherwise there never could have been any sort of specific response or pattern reaction. The pattern reactions, therefore, belong to the epicritic, and creatures even far down in the scale of animal life, as well as man, are organized by nature in such a way that the protopathic urge or drive is, in many ways, repressed and utilized, and remains merely as the motivating force back of the behaviour patterns.

With man many additional behaviour patterns must be acquired. Each acquired pattern is a new habit learned, and each is a form of repression or inhibition of instinct. When, therefore, men argue for freedom from the inhibition of instincts, they are often arguing for that which is psychologically impossible. As psychologists we are concerned, however, with the *disguises* which the protopathic urge or unconscious assumes when it is repressed by a very heavy crust of habit formation.

Perhaps if we consider the protopathic itself, it is the same in all instincts, whether ego or sex or food or gregariousness, and from the standpoint of the protopathic there is *only one instinctive urge*. From the standpoint of the epicritic, the number of instincts is indefinite and *incapable of classification.* Moreover, as Kantor suggests, from this standpoint there would seem to be little difference, except in the amount of inhibition, between an epicritic repression which is inherited, and one which is acquired by habit. Successful repression is

the true psychological aim, and the criterion of behaviour must be found here. Where repression is unsuccessful, the protopathic trends escape in new mechanisms of disguise, in the manner that the Freudians have showed us, and it is here more than anywhere else that we need both socially and individually to understand ourselves.

In conclusion, we have seen that psychologists seem to be confused in regard to instincts. They would appear to be correct in holding that intelligence plays a smaller rôle in human behaviour than was formerly believed to be the case. They are correct in taking an evolutionist view of human nature, and in seeking to distinguish between those behaviour trends which are native and those which are acquired. They would seem to be in error whenever they strive to specify certain definite instincts in terms of the ends which those instincts serve. The ends then become mere arbitrary abstractions. Again, if we look upon instincts as Watson does, in terms of the reaction patterns which they show, we see that it is extremely difficult and perhaps in many cases unnecessary to try to differentiate instinct from habit. But the truth persists, as James says, that human beings, like other living things, *like their own ways* and will strive to persist in them.

CHAPTER EIGHT

MAN AND HIS EMOTIONS

§ 1

DISCUSSIONS of emotion are often prejudiced by what one thinks of human nature in general. Plato, in the dialogue *The Republic*, assigns to emotion a very secondary place in human nature, and is concerned chiefly with the ways in which emotion should be controlled. He says, in substance, that the soul has three faculties: the reason, the emotions, and the desires of the body. These three faculties are, to Plato, similar to the three classes in his ideal social system or state. The highest class, the ruling class, consists of the noble philosophers, the knowing ones, who, because they have knowledge, are the true rulers of the State. The second class, which consists of spirited men, fighters, administrators, and the like, is of a less intelligent type, and should be controlled by its superiors, for it is necessary for the preservation of the community. Beneath this class is the plebeian class, the business men and the workers. Plato's idea of justice is very different from ours. To him, justice is harmony within the State or, in other words, the successful working out of the stratified order of society which I have just sketched.

So in the soul, harmony should prevail, and such harmony means that there should be recognized a class distinction between the faculties of the soul. Reason comes first and is to rule. Emotions are second and they must be controlled by reason. This emphasis upon the control of emotion by reason is very common in philosophy. A thinker as far removed from Plato as was David Hume in the eighteenth century shared this view. He speaks of emotions as the 'passions,' and he was opposed to many of the popular movements of his time because he felt that the crowd was too emotional. As he put it, the behaviour of the crowd is characterized by 'enthusiasm' rather than by reason. Simi-

larly, many conservative thinkers have looked upon the masses as mere creatures of emotion.

Contrasted with this view is that of Romanticism. Romanticism was primarily a cultural or artistic movement during the latter part of the eighteenth and early part of the nineteenth centuries. But Romanticism had a certain psychological outlook. The Romanticists were very much concerned about the emotional life. To them emotion was of primary importance. They conceived of freedom as the expression of emotion. The life of reason was a mere dead formality. The value of life consisted in its emotional possibilities. Thus the Romanticist reversed the view of emotion and reason which Plato and the older philosophers held. I think the chief factor which motivated these different views of emotion was the different attitudes toward human nature. The Platonists, like the theologians, sought to subordinate human nature to eternal principles. They were in a way constantly on their guard against the humanity in themselves. The Romanticist was a humanitarian, if not a humanist. To his mind human nature was essentially good, and, therefore, he demanded freer expression of it through various emotional outlets.

Needless to say, each of these views is unpsychological. We cannot approach a problem like this from the standpoint of a made-in-advance theory. As students of psychology we are not concerned here with the 'goodness' or 'badness' of the emotional life in general. We know nothing of the 'soul and its faculties,' nor of 'pure' reason. Neither is it possible for us to isolate emotion, and talk in the manner of the Romanticist about emotional satisfaction, as if emotions could be indulged without regard to consequences, or with indifference to the situations in which we find ourselves. Our criterion must not be merely subjective feeling about human nature, but adequacy of adjustment. Our method must be descriptive. We should regard emotion as a form of reflex action.

James says, 'Instinctive reactions and emotional expressions thus shade imperceptibly into each other. Every object that excites an instinct excites an emotion as well. Emotions, however, fall short of instincts, in that emotional reaction usually *terminates in the subject's own body*, whilst the instinctive reaction is apt to go farther and enter into practical relations with the exciting object.'

To McDougall and many others, emotions are essentially instinctive. They are, for the most part, regarded as *affects* of certain instinctive trends. According to this view, as we saw in the chapter on instinct, each instinctive reaction is coupled with a certain *feeling tone* or affect: as, for instance, the instinct of flight and the emotion of fear, the instinct of pugnacity and the emotion of anger. What we said in criticism of this view in the previous chapter applies here. The list of emotions, like that of instincts, is arbitrary. I suspect that when we talk about 'fear,' or 'anger,' or any other feeling in this way, we are really substituting abstract ideas for the facts of experience. James says, 'The trouble with emotions in psychology is that they are regarded too much as absolutely individual things. So long as they are set down as so many eternal and sacred psychic entities, like the old immutable species in natural history, so long all that can be done with them is reverently to catalogue their separate points and affects.' He adds, 'As far as "scientific psychology" of the emotions goes, I may have been surfeited by too much reading of classic works on the subject. But I should as lief read verbal descriptions of the rocks on a New Hampshire farm as toil through them again.'

Since James's time, a *physiological* approach to the subject has given us an entirely different point of view regarding the emotions, one which makes the subject vastly more interesting and important. James himself did much to contribute to this new view. He divided emotions into what he called the 'coarser' emotions, such as we have in our more violent feelings, and the more 'subtle' emotions, such as religious

reverence and appreciation of beauty. In substance, James maintained that both types of emotion are *pure bodily feelings*. Not psychic entities, therefore, but *sensations* stimulated by purely physical changes set going in the various organs of our body, constitute emotions, even the loftiest of them. There is no 'spiritual faculty' of emotion. There is no organ or seat of emotion in the brain. People who talk about 'training the emotions' as if emotions were something which could be developed by exercise, are simply talking nonsense. Training emotions consists in the formation of *habits*, not so much habits of feeling as *habits of thinking*, through which our emotional reactions are adequately released.

§ 2

THE JAMES-LANGE THEORY OF EMOTION

Let us see what James contributed to the psychology of emotion. He says, 'Bodily changes follow directly the perception of the exciting object. . . . Our feeling of the same changes as they occur, *is* the emotion.' In other words, when, for instance, we see a terrifying object, we do not perceive the object, then have an emotion known as fear, and then, because we are afraid, have certain bodily feelings. There is no reason for the intervention of this middle psychological entity at all. We are so organized by nature that, just as when a hungry animal sees food the immediate reflex response to such a stimulus is the secretion of saliva, so when we see the terrifying object, there are physiological changes which *immediately follow* – the trembling of the arms and legs, the parched sensation in the mouth and throat, due to the checking of the function of the saliva glands, a creeping sensation of the skin, rapid pulse, the catching of the breath, and so on.

All these bodily changes follow immediately on the stimulus,

and are as *purely reflex* in their nature as is the ringing of an electric bell when a button is pushed which closes the circuit. These bodily changes are not the result or the effect of emotion; *they are the emotion*. As James says, we do not run away because we are afraid; we are afraid because we run; or better, because of the impulse to run, together with the physiological changes which are in preparation for strenuous bodily activity. He says that objects excite bodily changes by a pre-organized mechanism, and that the changes are so indefinitely numerous and subtle, that the entire organism may be called a 'sounding board.' These changes are felt directly or obscurely the moment they occur. They are going on in us all the time, as the body is stimulated by this or that object, and they constitute the feeling-reactions which go on during every moment of our experience.

James says that if we fancy some emotion and then try to abstract from our consciousness of it the feelings of its bodily symptoms, we find we have nothing left. For instance, should you stand in the presence of a terrifying object and find that you had no trembling of the muscles, no catching of the breath, no creeping sensation of the skin or 'goose flesh,' no change in breathing or in the pulse rate, you would say correctly 'I am not afraid of this thing.' The same is true of grief or of love or of joy or of humour. Think of any one of these emotions; then think away all the bodily sensations, and you will find yourself merely holding in consciousness an *abstract idea* and not an emotion at all.

The theory of emotion which I have just tried to state is known as the 'James-Lange' theory. There has been some criticism of it of late, but I do not think that it has been successfully challenged. Certainly much that is being said about the subject now would seem to confirm it. Of course, as James said, the theory cannot be absolutely proved until we find a number of cases of individuals who are perfectly conscious, yet are in such an anæsthetic stage that they have no sensations of the changes going on in their bodies. One

or two such cases have been reported and they would seem to confirm the theory. But they still may be questioned on the ground that such an anæsthetic state is very difficult to determine. Cannon reports that physiologists have made experiments on dogs and cats, but without very positive results. However, on the whole, I think, the weight of the evidence would be on James's side.

Another class of evidence which James points out, is that of certain psychopathic cases. There are certain abnormal individuals who experience the most violent emotional excitement when there is no outside stimulus present. A person suffering with melancholia may experience great depression; others will experience fear or anxiety, for all of which there is no apparent cause other than the processes which are going on in *the patient's own bodily organs*. One of James's conclusions from his theory is, I think, open to some criticism, though he himself qualified it. He says that if one wishes to control his emotions, he should put himself in the requisite bodily situations as nearly as possible, and 'cold-bloodedly' and deliberately imitate the bodily states of the desired emotion. It is very doubtful if this can be done successfully. Some actors tell us that they actually do experience the emotion which they simulate. But in all probability the emotions are such 'pattern reflex' responses, that nothing like a complete bodily emotional state can be deliberately assumed. Some of the factors will be left out: the feeling will not be genuine.

§ 3

EMOTION AND EVOLUTION

So far our discussion has dealt with what James calls our 'coarser' emotions. If the theory is true regarding these, it must also be true in regard to the finer and more subtle, 'spiritual' feelings associated with religion, duty, and art.

These emotions, also, in so far as they are emotions, and not mere ideas about emotions, even though the feelings themselves are very subtle, are as truly physical as the others.

Emotion then, like instinct, comes within the process of evolution. Just as natural selection has brought it about that each species has a certain bodily *structure*, so also has the same process resulted in equipping each species by inheritance with certain instinctive and emotional *responses* which are characteristic of that species. A problem arises as to what 'survival value' our emotions have. Many of them, like love of music, do not seem to be of any advantage to an organism in the struggle for existence. Oftentimes our emotions are a disadvantage, because they upset us so much that we are not as effective in some situations when we are emotionally excited as we are when cool-headed. The advantage in a critical situation is most often on the side of the person who does not become too quickly excited. Yet, without our emotional interests, it is doubtful if we could ever have achieved very much, or made any very persistent efforts, since most of the 'good things' of life are associated with our emotions.

James, following Darwin, however, suggests that many emotional responses which are of no practical use to the organism at the present time may once have had such use. He quotes Spencer to the effect that some movements of expression, particularly those of the muscles of the face, which occur in various of our emotions, are 'weakened repetitions' of movements which formerly, 'when they were stronger,' were of utility to the subject. Thus, distension of the nostrils in anger is interpreted as a survival of the way in which our ancestors had to breathe when the mouth was filled by a part of an antagonist's body that had been seized. We shall see later, when we discuss Dr. Cannon's work on emotion, that the bodily changes which occur serve the organism in ways which could not have been known in James's day.

§ 4

DR. WATSON'S STUDIES OF EMOTION

James's contention that emotions are essentially bodily changes is carried much farther by Dr. John B. Watson. Watson as a behaviourist, of course, eliminates from his discussion of emotion the whole *subjective* side. He is not concerned with feelings. He cautions the student that in giving an account of emotion he do so strictly in terms of 'stimulus and response.' The *physical responses* are all that Watson takes note of. He says, 'An emotion is an hereditary pattern reaction involving profound changes of the bodily mechanism as a whole, but particularly of the visceral and glandular systems.' Emotion differs from instinct largely in that the response is confined to the subject's body. If one should insult you and you should impulsively strike out at him, your action would doubtless be an instinctive response. But if, upon receiving the insult, you should blush, the blushing would be an emotional response.

It is not quite correct, however, to say that the emotional response is confined entirely to the subject's own body. There are also, as Watson and Rivers say, such emotional responses as gestures and random movements. A person in the shock of emotional excitement may be thrown into a 'chaotic' state. He may collapse; 'his cigarette may fall from his fingers'; he may make rapid and 'wild' movements with his arms and legs; throw things about or smash up the china; he may laugh or weep. These latter are movements of the whole body and are called by Dr. Rivers 'mass reactions.' Whatever movements are made, such emotional responses are *non-adaptive*. They do not put the organism, as do instinctive responses, into any effective relationship to the exciting situation. One must, to some extent, 'get over' intense grief before he is able to take up again his daily tasks. He must 'control his temper' if he is to be very effective in

dealing with an irascible person. He should not be too 'sentimental' if he is to be effective as a lover, or as a member of a family or a religious community, or as a citizen. He must master his shyness and embarrassment if he is to become a successful public speaker.

Watson says there are several methods of studying emotions. The simplest is the *genetic method*, the method similar to the one which Watson used quite successfully in his study of instinct. Since emotions are inherited modes of response, it is well that some distinction be made between those emotional patterns which are inherited and those responses which are acquired. As in the study of instinct, therefore, Watson carefully observed the responses of small children. He found that there were at least three types of inherited emotional responses.

First, the small child gives evidence of *fear response*, but this response is elicited by fewer objects than we commonly believe. Experiments were made with various animals both in light and in dark rooms, and infants did not show any fear of rats, or dogs, or black cats. Watson says that the fear reaction will, however, take place when the child is dropped, or when certain loud noises are heard. Second, a child will show *anger* when the movements of its arms and legs are restrained. Third, it will give evidences of *love* when its body is gently stroked.

Our author, however, says, that the genetic method will not greatly enlighten us because, just as in the case of instincts, the inherited reaction patterns of emotion very soon become modified by habit and learning. Another method he mentions is *word reaction tests*. This subject really belongs to psycho-analysis. Probably the best word reaction test is that of Jung. A list of 100 words is prepared, and to each word as it is spoken by the experimenter, the test person is asked to respond by the first word that comes into his head. For instance, if the experimenter should say 'house,' the test person might say 'barn'; to the word 'tree' he might respond

with the word 'leaf'; to the word 'window' he might respond with the word 'glass'; so on and so on. Thus, by carefully noting the length of time which the test person normally requires in responding his reaction time is learned. This is usually about two-fifths of a second for ordinary words. There are in the list, however, certain words which are 'complex words'; that is, they are associated with some emotional reflex, so that there is a *balking* in the association process between the *test* word and the *respond* word. The reaction time is lengthened in such cases, and often a surprisingly irrelevant or unusual word is given. A careful study of these unusual words, together with the words to which the reaction time was notably long, and an analysis of the general type of response, gives the experimenter a very good insight into the emotional character of his subject. This test is frequently used in psycho-analysis in order to determine what repressed and forgotten experiences are causing certain emotional disturbances in the lives of nervous patients. Watson also suggests that the *analysis of dreams* may give us similar information. We discussed this point in our chapter on Freud. In fact, psycho-analysis, as we shall see later, is primarily concerned with the problems of emotional adjustment.

Finally, Watson suggests a *physiological* study of the emotions. There are in the body various *ductless glands*, or endocrine glands. These glands – the thyroid located in the neck; the suprarenal gland located just above the kidneys; the pituitary gland located at the base of the brain, and others – have been much studied of late, and their effects on bodily activity noted. It seems to be fairly well established now that the secretions of these glands have to do with certain of our emotions. This would appear, at any rate, to be the case with the activity of the thyroid and the suprarenal glands. Persons suffering with excessive thyroid function are apt to be very excitable, given to anxiety and fear, and their very facial expression suggests these emotions. They are often 'flighty' and jerky in their thoughts and movements. There

are other definite physiological effects of excessive thyroid secretion, each of which must have some effect on the emotional life. The secretion of the suprarenal gland is known as *adrenol*. This substance can now be manufactured in chemical laboratories; it is sold by druggists under the name 'adrenalin.' The chemical analysis of the blood after emotional excitation will reveal certain changes in content, which changes may be regarded as important elements in the emotional responses which the organism makes to certain stimuli. For a valuable discussion of the function of these glands together with the autonomic nervous system, one should read the very interesting book by Dr. W. B. Cannon, called *Bodily Changes in Pain, Hunger, Rage and Fear.*

§ 5

DR. CANNON AND THE PHYSIOLOGY OF EMOTION

It is in the work of physiologists like Cannon that we learn what are the *specific bodily changes* in emotion, which James said *must* exist but which he was unable, because of their complexity, to trace. A knowledge of these specific changes will show us more convincingly than James showed, that emotions have the function of adapting an organism to situations. At least *some* of the bodily changes in emotion are now known to have the function of preparing the organism for strenuous exertion. Cannon's work deals largely with the 'autonomic' nervous system. He shows that this system is really *three systems* of nervous ganglia, located in the abdominal cavity, and connected with various organs like the digestive organs, certain glands, and the unstriped muscles of the *viscera* and *circulatory system*. The nerve ends of this system also connect all those organs which have nerve ends, running to them from the brain or spinal cord.

The uppermost portion of the autonomic system is called the *cranial*. Cannon says that the cranial system governs

those functions that have to do with nutrition; that is, with the general function of supplying the body with the sources of its energy and power. It regulates the flow of saliva and the various digestive fluids. The feelings associated with these functions are taste and delight in food – in fact, all those feelings which the Freudians tell us are connected with the 'food-getting instinct.'

The middle part of the autonomic system is called the *sympathetic*. The function of this system is primarily to act as a *check* upon the others and to govern the secretion of such glands as the sweat glands, the gland which secretes adrenol and the action of the liver in secreting sugar into the blood stream. These substances, adrenol and sugar, may be found by chemical analysis, when the organism experiences pain or great emotional excitement, especially rage and fear. Cannon says that the secretion of adrenol puts the organism on a 'war-footing.' Adrenol heightens the blood-pressure by contracting the muscles in the arteries. It increases respiration and on the whole causes a more rapid combustion of the cellular tissue of the body. Thus adrenol makes possible a very greatly increased *output of energy*. It also stimulates the liver to secrete, as I have just said, sugar. Sugar is a very volatile, combustible substance and the extra supply of it in the blood equips the organism with the material which may be used up in intense activity. Thus, the emotions rage and fear are adaptive. They do not adapt the organism directly to any outside object, but they adapt it to its own needs for exertion.

The *sacral* or lowest portion of the autonomic system has to do with the emotions and the functions of sex. Whenever the cranial and sympathetic impulses meet in an aroused emotion, the sympathetic tends to inhibit the cranial functions, such as the secretion of saliva, gastric juice and bile. Hence, the dryness of the mouth accompanying the feeling of fear; hence, also, the likelihood of indigestion when food is taken while the subject is excited by fear or anger. Also

when the sympathetic impulse meets with the impulses of the sacral system, there is an inhibition of sex interest and function. From this Cannon argues, since all instinctive impulses when inhibited may arouse fear and anger, that the sympathetic system has the adaptive value of liberating energy so that the organism may overcome whatever obstacles stand in the way of its natural behaviour.

§ 6

PSYCHO-ANALYSIS AND EMOTION

Finally, let us note what the Freudians have to say about emotion. *In all abnormal mental life there is something the matter with the emotions.* Very many nervous symptoms are the result of a 'fixation' of an emotion. As we saw in the chapter about Freud, the psycho-physical development of a child is a very long and complicated process. Every small infant has its emotional interests, largely fixed on its own body, and is chiefly concerned with the functions of 'alimentation.' Later, the growing child has its emotional interests largely directed to its parents. It loves them, trusts them, believes in them implicitly, and experiences, as it will never again experience in the struggle for existence, freedom, a sense of self-importance, and a feeling of security. The adolescent youth must pass through certain emotional crises in which his emotional interest is relatively detached from the parent images, and becomes directed toward the objects of his wider environment. In this way he is preparing himself for what the Freudians call 'object love,' or normal attachment to a person of the opposite sex.

Now in none of these transactions is the process an easy one. The individual always tends, so far as possible, to react to new situations in habitual ways, and to preserve those feelings which in a former stage of his development have given him satisfaction. If in any of these crises there is a shock, if

there are tasks that are inadequately met, if because of previously acquired mental habits, the growing individual is unable to react with emotional adequacy to the new situations about him, he is likely to substitute for the facts, memory images acquired in a previous period of his development – images, the contemplation of which give him consolation. Thus he may retain throughout his later life the emotional characteristics of an earlier period.

For instance, the adolescent youth, breaking away from his parents, must frequently pass through a period of spiritual loneliness and of disillusionment concerning the father and mother, whom in a previous period of his life he regarded as perfect beings. In adolescence also he becomes very much preoccupied with himself. He tends to distrust his powers, to compare himself with other persons, sometimes even to doubt if he is really a normal human being. He is strange to himself and the world has also become strange to him. What is more natural than that he should seek to make this larger new world a *family affair*, to conceive of it as similar to the situations which he once knew when parental care provided all his wants, held him to be the most precious person in the world, and protected him from all harm?

A study of the psychology of religion shows that most normal people retain throughout their lives some degree of emotional fixation upon the parent image. Most of the emotions in religion have to do with this fixation. With psychopathic individuals this fixation is serious. The individual is never quite able to react emotionally as an adult. His feelings remain those of a child and instead of meeting the tasks of his life, he is likely to return in imagination to the period of his childhood, take refuge in fictions and images that belong to that period, and preserve his childish emotional satisfactions at the cost of his own spiritual maturity and with great loss in the adequacy of his behaviour. Thus adjusted to an earlier situation in his history, he be-

comes unadjusted to the environment in which grown-up persons must behave. These emotional fixations are survivals of childish habits of response and cause many neurotic phenomena, anxieties, and conflicts, and phobias and disturbances of all sorts.

There is also an emotion of great psychological interest which we will discuss in a later chapter, the feeling of *inferiority*. It is enough to say here that the protest against this feeling is a very important sociological fact, giving rise to much morbid ambition, social unrest, crowd-mindedness, and quixotic reform. It will be remembered that in the chapter on Freud, we discussed this author's early papers on hysteria, and we noted that Freud said that the symptoms of this disease were the result of certain 'trauma' or psychic wounds; in other words, that hysteria was the disease which often accompanied inability to react adequately to certain experiences. Freud said that this inability of emotional response was due to the 'suppression of the affect.' Freud further said that when the whole experience was restored to the memory of the sufferer, he lived through a period of intense emotional excitement which had all the appearances of a delayed response to stimulus; that is, it was as if he now experienced the emotions which he should have experienced when the painful event occurred. Freud calls such delayed response 'abreaction' and says that it is necessary to the cure of the patient.

The problem of emotion, therefore, for psycho-analysis is that of securing adequacy of response. I do not mean merely unrepressed emotional outlet, but rather the *appropriate* response. An emotionally balanced person is a normal person, and the balance of emotion must be achieved through facing the facts both of ourselves and of our environment. It is just the inability or unwillingness to face facts that causes most emotional disturbances in human life.

§7

PSYCHOLOGY AND THE PROBLEM OF HAPPINESS

A consideration of the whole problem of emotion leads us to the view that emotional balance comes very near being a psychological definition of happiness. In this sense psychology aims to make people happy, for happiness is a matter of the emotions. Where there is conflict or persistent evasion of the tasks of life, happiness cannot be. Psychology is, therefore, concerned about *adjustment*. First, adjustment of the individual to his environment, and second, those habits of thought which enable an individual to bring a working harmony into the various elements of his own nature.

The environment of modern civilization, in spite of all our advantages, is hard. Probably in no period in history has there been so great a demand upon man as now, and perhaps also our mechanized society, together with our scientific view of the world, offers men fewer emotional consolations than in earlier periods of history. Undoubtedly the environment can be and has been improved in many ways, but it is doubtful if the total amount of happiness is greater now than it was in earlier times. Given any environment whatsoever, the psychological problem remains. Men can be happy in any civilization only as they develop certain mental habits, which give them the capacity to act with emotional satisfaction.

People will always find their happiness in many different ways. There are those who find it in getting drunk. You will remember Harry Lauder's song, 'I am a miserable divel when I'm sober; but I'm vera, vera happy when I am full.' Alcohol has the effect on many men of paralysing certain inhibitions and, therefore, of permitting the escape of certain emotional responses which vary all the way from conviviality to the maudlin sentimentalism of the drunkard. Again, people find happiness in loving and in being loved. Here, as

we said before, happiness is not merely the pleasures of physical functions of sex. A large and important element in love is the joy people take in being flattered. Notice the talk of lovers, and you will see how much of their conversation is that of a little 'mutual admiration society.' We feel greatly elated and important when we are told that we are 'all the world' to somebody and that we are beautiful. Then we become heroes in our own eyes, and this self hero worship of lovers is so great a factor in this emotion, that when mutual flattery stops, love often flies out of the window.

People also find happiness in wealth. Not merely in the physical enjoyment of this world's goods, but in the sense of self-importance which possession brings them. So also with the happiness that comes through good workmanship and sociability. We are happy when our society is generally sought and, as James once said, there could be no greater punishment for us than if every one should 'cut us dead.' We enjoy being 'in' things. The same principle applies to the happiness which comes with freedom. We are miserable when we are ordered about too much. The joy of freedom consists very largely in the happiness of the feeling that we are our 'own boss.' The happiness of having a 'good time' also consists largely in cutting loose from certain restraints, in adventure, in the sense of doing unusual things, hence, in experiencing life more largely; therefore feeling ourselves to be more effective than we can possibly feel in the humdrum of everyday life.

Now in all these various forms of happiness it seems to me that there is at least one common element, an element which is recognized in popular speech when we say 'enjoy yourself.' What we are enjoying when we enjoy anything is, to some extent at least, enjoyment of *ourselves*. Just as Freud says that in our dreams, which are the expression of repressed desires, we always are the hero, so in the wide-awake pursuit of happiness it is very important that the emotions about ourselves be those which are appropriate to the facts of the

environment in which we have to live. I do not mean here to imply that there is nothing in happiness except the old principle of 'self-love.' I do mean that, since many of our deepest emotions have to do with ourselves, (and what else could we expect since we have seen that emotion is bodily feeling?), it is in regard to the self-feelings that the most conflicts of emotion may arise.

The Freudians have found that many phobias and anxieties vanish when one is taught to face courageously the facts about himself. The control of emotion, therefore, is not to be achieved merely by making conscious efforts to feel in desired ways. Emotion is an inherited mode of response. Like instinct, the original patterns become modified by learning and by habit. They depend often upon our general bodily condition or state of health. One can seldom repress an emotion just by deliberately willing to do so. You may compel yourself to have kindly intentions toward a person whom you do not love, but you will probably not, by making an effort to do so, force yourself to love such a person. In a moment of anger you may control certain *overt* actions by an effort of the will, but you will usually not thereby dispel the feeling. So, in moments of depression, a person suffering with melancholy may make the most strenuous efforts in the world to rid himself of this feeling without success.

§ 8

THE CONTROL AND GUIDANCE OF EMOTION

There is, however, a way of controlling the emotional life, and that is through the formation of the *right habits of thinking*. We see an excellent illustration of this in respect to humour. What is the difference between the person with a very refined and subtle sense of humour and the coarse, vulgar guffawing ruffian with his? I think the difference is not primarily a difference in the native capacities for feeling

of the two men. The difference consists in the *sort of objects* which they have *learned* to notice and to react to. The training, then, of the sense of humour, is a training of the intelligence in discrimination, of the capacity to make fine distinctions.

We also see an illustration of this point if we compare the superficial person of the maudlin and sentimental type with the more genuine type. Sentimentality is emotional superficiality, not because the feelings themselves are less genuine, but because superficial people have not learned to think for themselves, and therefore they try to feel, at certain times, in ways which they imagine that other persons will regard as proper or as conventional. When such persons acquire the habit of thinking for themselves, it frequently happens that their entire emotional life becomes richer and fuller, simply as a result of more honest and genuine thought. So with the emotions generally. If we can discipline our thought process, compel ourselves to see the facts of life and of ourselves as they really are; if we can learn the habits with which to meet situations with the appropriate responses, such habits will stand us in good stead. In the moments of emotional crises we shall find that straight thinking generally helps us to have adequate feeling. Great as are the emotional differences among people, they are probably not so much due to inborn differences in our *inherited mode of response* as they are due to the differences in men's *capacity to learn*. In other words, the greatest differences among men are the *intellectual* differences. The difference, then, between psychopathic emotionalism and the emotional response of the normal individual is due wholly to those habits of thinking which throughout a long experience each has been gradually forming. To live richly and fully, with a sense of satisfaction, the first requirement is that one learn to think. This leads us to our next chapter.

CHAPTER NINE

HOW WE THINK

§ 1

Is man a rational being? This is a perplexing question. When one considers the amount of thinking that goes on in the world, it is difficult to decide whether to draw an optimistic or a pessimistic conclusion. When we think of the fruits of science and realize what heights of triumph the human reason has attained in its masterful knowledge of the detailed facts of nature, we may for the moment indulge ourselves in the fancy or hope that man, through the use of his intelligence, may yet control the forces of this earth. And yet, we have seen many of the achievements of science turned to engines of human destruction for ends which were set by passion rather than by reason.

Again one may look at our folkways and conventions and see that many of them are stupid and wrong-headed, evolved by the masses, not as intelligent solutions of problems, but for ends which were wholly irrelevant to the situations in which these customs of ours regulate our behaviour. And yet, such customs survive and seem to have survival value for people who practise them.

Or one thinks of the scientist or philosopher whom he knows in life. Professionally those men are so clear-eyed and hard-headed, so objective and capable of impersonal thinking; and yet each, perhaps, being after all quite human, has his soft spot. There are situations in the life of the most reasonable person, a person with the best-trained mind, which he finds it impossible to deal with rationally. One wonders how much reason has to do with human behaviour taken as a whole, and how much such behaviour is the fruit of chance, of superstitious belief, of personal interest, dogma, and tradition. The older philosophers seemed to believe that reason was a faculty which needed only to be exercised and trained in order to assume the proper ascendency in the life of men. Socrates held that knowledge could only be attained

by the exercise of reason; that knowledge was, therefore, the possession of the few, the philosophers; whereas the thinking of the masses did not bring them knowledge of the truth, but resulted only in 'opinion.'

However, Socrates believed that this faculty of reason did exist in every one and that men, therefore, had knowledge which they did not know they possessed. He felt that it was the task of the philosopher to draw such hidden knowledge out of the recesses of the human spirit. Kant seemed to think that Reason was the same for all minds; that, whereas 'pure' reason could not give us ultimate reality, nevertheless, the laws of thought were the same in all, and universal. So in describing the various kinds of judgments which the human mind may form, Kant felt that he was giving us an account of universal reason.

To the student of modern psychology, such views as I have just outlined are far from adequate. Undoubtedly there are certain principles of logic which the trained mind ordinarily may follow in pursuing its thought processes, but it is doubtful if anyone's mind habitually works in such formal ways. James once said that our temperament dominates our thinking to an amazing degree, even the thinking of the greatest philosopher. Freud and Jung have shown that the unconscious makes its presence felt, together with its repressed desires, wish-fancies, and fears, even in the work of the most 'dry-as-dust' philosophers. Many persons resent the existence of what James calls the 'will to believe,' but as a description of the way in which most thinking goes on, James gave in this phrase a fairly accurate account of what happens.

§ 2

VARIOUS KINDS OF THINKING

It may be said that there are various kinds of thinking. There is, first, *reverie*. Second, there is what might be called

trial-and-error thinking, the kind of thinking that perhaps animals do. Third, there is the thinking which consists in *solving problems*. Fourth, there is what Freud would call *rationalization*.

Reverie, as Dewey and James have both shown, makes up the greater part of the mental experience of us all. James says much of our thinking consists of trains of images suggested by one another, of a sort of spontaneous reverie, of which it seems likely enough that the higher brutes should be capable. . . . Links between the ideas are either contiguity or similarity. . . . As a rule in this sort of irresponsible thinking, the ideas which follow and are coupled together are 'empirical concretes,' and not abstractions. 'A sunset may call up a vessel's deck from which I saw one last summer, the companions of my voyage, my arrival into port, and so forth. Or it may make me think of solar myths; of Hercules's and Hector's funeral pyres; of Homer and whether he could write; of the Greek alphabet, and so on.' James also tells us that there are minds to whom the sunset means only supper time or calls up some superficial platitude. He says, 'If the habitual contiguities predominate, we have a prosaic mind; if rare contiguities or similarities have free play, we call the person fanciful, poetic or witty. But the thought as a rule is of matters of fact in their entirety. Thinking of this sort has been called 'free association,' day-dreaming, 'wool-gathering.' If one's thoughts appear to run at random and without effort – one thought making us think of another and that of a third, and so without any voluntary direction – we speak of such thinking as reverie.

In normal persons this reverie is usually of a pleasant nature, and the psychopathologists have shown us that day-dreams are pleasant, not merely because we make no effort to think in this fashion, but because such thinking, like dreaming, consists wholly in those wish-fancies which give us *imaginary escape from realities*, provide us with consolation in our losses and failures, and have the function, on the whole, of encour-

aging our self-feeling. If you try to catch yourself in such moments of reverie, you will probably notice that what you are doing is making an imaginary hero of yourself.

Of course, we like to be heroic in our own eyes, and to imagine the world to be congenial to us; therefore, the ease with which we day-dream and the difficulty, frequently, of inducing ourselves to face the cold, hard facts of life. This type of reverie, aside from the part which it plays in poetry and in art, does not greatly aid us in intelligent behaviour. Yet we find that there is a place, even in the most scientific thinking, where something like this is necessary if new and fruitful – creative – ideas are to occur. There is a place where new associations among things must just 'pop' into our heads. No effort on our part and no training can ever make an idea which has not been thought before, come into anyone's mind. We shall see why this is so later in the chapter.

The second kind of thinking I have called *trial-and-error* thinking. This is hardly the correct term. It might also be called routine thinking, as I believe Dewey calls it. I use the term in this connection because the type of thinking we are now discussing consists very largely of associations of ideas which we have learned very much as animals learn. In the chapter on Habit, you will remember that I referred to experiments in animal training like those of Thorndike and others. An animal may be put in a box. He must learn to pull a latch-string in order to unlock the door and escape. For a long time he makes frantic efforts which are for the most part pure random movements; finally, by accident, he will hit upon the movement which leads him to success. The second time he is placed in the box it will not require so long for the animal to make the successful movement. Slowly there will be built up in the mind of the animal an association between the movement that leads to success and the experience of escaping. After a sufficient period of training, the animal will pull the string of the latch after only one trial. Now in this type of learning it is not necessary to assume that there

has been any intelligent act of looking over the situation or of consideration on the part of the animal. Having once learned the trick, he will perform it whenever he is placed in a certain situation.

In the same chapter (on Habit), I said that most of the things men learn are learned in this way, and that most of the thinking we do is of this sort. One has been taught a trade, or a profession, or a foreign language, or certain ethical, patriotic, or religious principles. All of these elements of this teaching are what Watson calls 'conditioned reflexes.' We carry a great many such systems of reflexes about with us as a part of our organization, and upon most occasions we simply permit a situation to stimulate us to behave or speak in the habitual way. And as, according to Watson, thinking is just sub-vocal talking or implicit language habit, it would seem that most of our thinking is of this routine 'trained animal' sort.

People who merely repeat what they have been taught in childhood very seldom experience any other kind of thinking. When it is suggested that 'people think for themselves,' what is really meant is that they break these routine habits and, instead of acting in the strictly habitual way, stop and consider the situation in which they find themselves. In the above quotation of James, it will be noticed that he says such association proceeds by coupling together 'empirical concretes,' not abstractions. This is true even in cases where one has learned to repeat certain abstract principles which he has been taught. A religious, patriotic or moral idea, for instance, may be nothing more than a phrase which an individual repeats as a part of his conditioned laryngeal reflexes in precisely the same manner (and on a very little higher mental plane) as Thorndike's animal pulls the latch string.

As James says, speaking of animal thinking, 'The idea in question is of an object *about* which nothing further may articulately be known. The thought of it prompts to *activity* but to no theoretic consequences.' If you will analyse your

own thoughts throughout a day, or study the speech and conduct of people about you with this in mind, you will see that it is possible to go through a whole day's activities and never once have a thought that is not of this strictly routine nature. In fact, *a large portion of the human race lives its entire mental life on this level.* We may get up in the morning, dress ourselves in the way we have learned, eat our breakfast in the routine fashion, repeat the customary phrases that go with the various activities in which we are engaged, do our work in the way we learned to do it, talk as we hear others talk, eat the food we see others eating, repeat the stories we have heard, draw the conventional inferences from the facts about us, attend a motion picture in which all the situations are trite and all the captions platitudes, read the newspaper editorials which merely repeat the notions which we already believe, go to a patriotic or religious meeting where we are again told the 'old, old story.' New situations and new possibilities of experience and insights may be all about us and yet we may never see them at all. If our environment should remain forever the same, the human race could get along fairly well with this sort of thinking, though, of course, it could make no progress. On most occasions we should probably do the 'right thing,' for by the 'right thing' most people mean the thing which is *usually done* on a given occasion.

But the world in which we live is a changing world, and situations are always confronting us in which *customary ways are irrelevant.* The intelligent person, therefore, is one who tries to behave and think in ways which are relevant as well as conventional or traditional. This kind of thinking I wish to call *problem-solving thinking.* In most cases, there is, as Dewey says, 'an obstruction in the way.' He says, 'As long as our activity glides smoothly along from one thing to another, or as long as we permit our imagination to entertain fancies at pleasure, there is no call for reflection. In the suspense of uncertainty, we metaphorically climb a tree; we

try to find some standpoint from which we may survey additional facts and, getting a more commanding view of the situation, may decide how the facts stand related to one another.'

This solving of problems is thinking proper. It is creative thinking. It consists primarily in picking out of any situation the *significant* or *relevant* factor and then of *comparing* that factor with something else. In this way new likenesses are discovered which enable us to deal with facts in new ways. James says, 'In reasoning we pick out essential qualities.' . . . In reasoning A may suggest B, but B, instead of being an idea which is simply obeyed by us, is an idea which suggests the distinctly additional idea C. . . . The result C, yielded by a true act of reasoning, is apt to be a thing voluntarily sought. It is not suggested immediately by the things given. It may be neither the result of our habitual forms of association of ideas, nor does it need to be similar to the thing which suggests it. It may be a thing entirely unknown to our previous experience.'

This singling out of the relevant factor is called analysis and abstraction. Things are no longer thought of in their entirety. The mind must have the *sagacity* to seize upon the one thing that may be said about a fact which is most important if one is to be led to a desired conclusion. Thus an infinite number of things may be said about the table on which I am writing. It has some relation to everything in the universe. But if I am a collector of antiques, I seize upon the significant fact that this is probably a Chippendale and not an imitation. As I am interested in writing, I seize upon the fact that the table is a comfortable one on which to work. James reduced this sort of reasoning to the syllogism:

'Call the fact or concrete datum S;
the essential attribute M;
the attribute's property P.

'Then the reasoned inference of P from S cannot be made

without M's intermediation. The "essence" M is thus that third or middle term in the reasoning which a moment ago was pronounced essential. *For this original concrete S the reasoner substitutes its abstract property, M.* What is true of M, what is coupled with M, then holds true of S, is coupled with S. As M is properly one of the *parts* of the entire S, *reasoning may then be very well defined as the substitution of parts and their implications or consequences for wholes.* And the art of the reasoner will consist of two stages:

'First, *sagacity*, or the ability to discover what part, M, lies embedded in the whole S which is before him;

'Second, *learning*, or the ability to recall promptly M's consequences, concomitants, or implications.

'If we glance at the ordinary syllogism:

S is M;
M is P;
S is P;

– we see that the second or minor premise, the "subsumption," as it is sometimes called, is the one requiring the sagacity; the first or major, the one requiring the fertility or fulness of learning. Usually the learning is more apt to be ready than the sagacity, the ability to seize fresh aspects in concrete things being rarer than the ability to learn old rules; so that, in most actual cases of reasoning, the minor premise, or the way of conceiving the subject, is the one that makes the novel step in thought.'

Now the important thing in this is, that there is no property which is absolutely essential to any one thing. 'All ways of conceiving an object are equally true if they are true at all.' It is just as true to say that my table is 285,000 miles from the moon as to say that it is a comfortable table to work on. The important thing is to be able to seize upon the *relevant factor*.

Perhaps I can make this matter clear by an illustration. Let us note the way in which Darwin probably arrived at the theory of natural selection, or 'descent with modification,'

Darwin, in *The Voyage of the Beagle*, notices that the plants and animals on crastial islands bear certain striking resemblances to and differences from those on the mainland. He notices also that there are indications that the shoreline has changed with the rising and falling of the land surface. Thus he is led to say that the changes in the environment have produced the changes in the forms of life on these islands. Comparing the creatures on the island with those on the mainland, Darwin notices certain changes or modifications. The noticing of these modifications makes him think of similar modifications which are produced by stock-breeders and farmers. Darwin knows that these latter modifications are brought about through a process of selective breeding. So the thought flashes through the great naturalist's mind, that perhaps environmental factors bring about a form of selective breeding similar to that which farmers use in producing new varieties of plants and animals. Hence, natural selection. Here is a new and thought-revolutionizing hypothesis. Let us see if we can state it in the same terms that James states his syllogism:

S is the environment;
M is the fact of modification of plants and animals;
P is the modification produced by selective breeding on the part of farmers.

Hence, S is P – the essential fact of environment in its modification of plants and animals. In other words, *the environment behaves like a farmer;* or a continent acting through geological times is like a farmer.

Now this is absolutely a new association of ideas. It is a comparison which has not been made before. There is nothing in the shoreline of an island which would, in and of itself, ever cause anybody to say that a continent is like a farmer. Darwin never could have said this except for the fact that, of all the things that could be noted about these islands near the shore, his mind seized upon *one very significant*

factor – the modification of plants and animals. There is no reason why he should not have thought of other things; no reason why he should have picked out this; but, having singled it out as the significant element, he is at once made to think of stock-breeders.

The fact that stock-breeders change the forms of animals and plants by selective breeding is something which it does not require any genius to know. Knowledge of this fact is simply a matter of information. But the ability to seize the significant factor regarding the modifications mentioned above and the ability to see likenesses between the modifications produced by environment and those produced by selective breeding is *something which cannot be taught*. It must come into the right man's head at the right time. There is no device for making such an idea ever come into a man's mind. It just has to walk in unexpectedly. It may be the idea one has been seeking for a long time, but it remains unknown until it makes its appearance in consciousness. When it does make its appearance, one must have sagacity enough to say, 'This is precisely the unknown idea I have been looking for.'

Notice then that fruitful or intelligent thinking consists partly in learning and partly in right ways of conceiving things; in making correct analyses; in seizing significant factors and in making unhabitual comparisons. Once Darwin said that environment is like a farmer, he gains a new insight into the cause of the modification of species which, if verified, upsets the thinking of 2,000 years.

James's account of thinking, which we have just discussed, has important theoretical consequences. Everything depends upon our seizing the right factor or, in other words, upon noticing and saying the right and relevant thing about a fact. To the chemist, water must be thought of as H_2O. To the hydro-electrician, it must be conceived of as a falling fluid, the weight of which contains so many foot-pounds of energy. Different aspects of water are noticed by the ice-man, the

thirsty man, or a Nantucket whaler. Water is no more truly H_2O than it is a place where whales swim, and, if we are to be successful as chemists or as engineers or as fishermen, we must note the factor which is significant for *our purpose*, and ignore all the rest for the time being. Thinking, therefore, is partial. It depends on purpose. It is for the sake of acting. It is by noticing the relevant aspects of things, and by comparing these relevant aspects of things in new ways, that situations have any meaning for us at all. All the meanings in the world are the result of this human partiality of ours. Thinking does not merely copy given meanings. It creates them whenever it achieves new and helpful comparisons among things. To a mind which was impartial to all the aspects of all things the world would have no meaning. A mind equally interested in everything would not be particularly interested in anything, and nothing would have any meaning since all things, being equally inevitable, would be equally important and indifferent.

What we call truths are meanings which lead us to satisfactory results in thought and in behaviour. Our thoughts become true when they are verified. Translate 'verify' from the Latin into the English and you will see that thoughts become true when we 'make' them 'true.' Truth is created by man and for man. Our minds do not get eternal principles or 'given truths.' They merely create new and unforeseen yet tremendously valuable and helpful comparisons. He who can fruitfully associate facts, which independently of himself would never have been thought of as belonging together, can think.

You will remember that in the chapter on Habit I discussed Dr. Watson's theory that thinking is sub-vocal talking or implicit language habit. He says that we think with our whole body, but primarily with our vocal cords and laryngeal muscles. To many students this is a rather startling assertion. But after all the important element in thinking is *not where* we think or with what organs the thinking processes take

place; the important element is *how* we think. How we think is really of greater significance than of what we think. Propagandists of all sorts are always concerned with *what* people think. Of course, it is important that we should entertain certain opinions and ideas. Social adjustment is possible only when there is a certain amount of agreement among people, and obviously there is a vital distinction between truths and errors. We should strive all our lives to correct the errors which abound in the thinking of us all. But one who centres his attention on what is thought, rather than how he thinks, is more prone to error than the person who practises intellectual self-criticism. He who changes his beliefs merely because he has been 'converted' from one group of current opinions to another, may have been only reshuffling his prejudices. He may be the same man, after he has changed his opinions, as he was before.

The thinker lives through his experiences. They modify him. He who has achieved correct mental habits may still be mistaken about a great many things. But he is at least less likely to be 'taken in' by specious arguments, and by sentimental appeal, than is the other man. Much of our public discussion about matters political, social, religious and moral, consists of the most violent assumptions, and for the spirit of investigation there is commonly substituted a partisan spirit even regarding matters where knowledge is easily accessible. The partisan spirit indulges itself in wild generalizations and in what Dr. Sheffield calls 'detonators of irrelevant emotional outbursts.' Intelligent public discussion is almost impossible, for the reason that people ordinarily are not using their language habits in order to solve problems. They are striving to *vindicate* their *principles;* not to *verify* their *hypotheses.*

§ 3

GOOD AND BAD HABITS OF THINKING

Bad thinking habits are so common that perhaps we should strive to get a clear notion of what some of them are, so that we may put ourselves on our guard against them. Professor Dewey says that the great difference among men is between those who think in a dull, slavish and routine way, and those who can intervene in the course of events with purpose and with some foresight of the results of their behaviour. If you will note most of the discussion of ethical and religious matters, for instance, you will see that the opinions of men on these subjects are very often not based upon consideration of results, but are the deductions from things which are quite irrelevant to the situation in hand. There are various influences which cause us to be victims of routine methods of thinking. Professor Dewey says that school conditions have much to do with this. It has long been the practice in our schools to require of the student merely the given and correct answer. The student acquires the habit of feeling that in finding the correct answer to a question which the teacher asks he is learning to think. As Professor Robinson[1] says, schools and colleges are places where there is 'much teaching but no learning.' Undoubtedly there are influences about most of our educational institutions which have little to do with the true educational aim, but are concerned chiefly with moulding the student to type, equipping him with ready-made answers in life, fixing his habits in such a way as to kill his natural curiosity and to assure his educators that he will thereafter think and behave in the ways that he has been taught.

Closely related with this is the habit of depending upon others for our opinions. As little children we necessarily live under parental authority. If we wish to know a thing we ask our parents, though, unfortunately, there are many important

[1] *The Mind in the Making*, Jonathan Cape Ltd.

matters concerning which we later learn that they did not tell us the truth. Nevertheless, the habit persists of quoting authorities, especially for the opinions we wish to hold. We like to be told what to think. We feel that whatever is written in some sacred book must necessarily be true, and true for the reason that it was written there. I know people who believe that the only reason why we should not kill or steal is because it is so written in the Bible. There are others who swear by the writings of Karl Marx or the Koran or the *Times*. I knew a man who had a tremendous reverence for anything in print, particularly a book that dealt with historical matters, without regard to the standing of the author, and without questioning the accuracy of his statement. This student would say, 'History says so and so.'

Recently I saw an illustration of this attitude in a class of very bright young workers to whom it has been my task to teach psychology. A series of extremely interesting problems in industrial psychology were to be discussed. Many of the problems were of such a nature that psychology in its present stage has no data upon which to frame an answer. About all that could be done was to state the problems and try to get the class to approach some of these industrial matters from a psychological point of view. Therefore, we decided to turn the sessions of the class into conferences, feeling that the discussion would help us to pick out the significant factors and isolate certain problems for investigation and research. It was necessary for the instructor to use the Socratic method, telling the class that the value of the course would be in the fact that together we should investigate subjects which had not hitherto been worked out. One of the ablest students in the class said, 'But, Mr. Martin, are you not wasting our time? We are here to be taught; not merely to conduct experiments.' Here was an intelligent young woman who, in spite of her intellectual independence in some things, would have felt herself more at home in a course of study where the instructor dispensed ready-made information, than

in a course where she was required to do some original thinking.

Our dependence upon others is the cause of much of that credulity which permits the uncritical acceptance of rumours. We had many examples of this during the war. There were large sections of the public who believed, without question, almost any story that was told about the enemy. I find a pamphlet published in 1918 in which there is a statement that the Germans were deliberately starving thousands of Polish people and grinding up their bones for fertilizer. Statements of this nature were current throughout the nation and we had the feeling that they should not be questioned. Anyone who did seek the truth in these matters was felt in some way to be disloyal.

We see the same credulity among men whom, by their professional training and education, we should expect to be the very incarnation of accuracy. I find among my newspaper clippings an article which appeared in the New York *Tribune* in April, 1919. This was the time when the Americans were very much concerned with the alleged bolshevist propaganda in their country. The article in question says: 'Last night the savings bank section of the American Bankers' Association sent out letters to the heads of all the savings banks asking their co-operation in a movement to induce returning immigrants to stay in this country. The letter said: "Due to bolshevik propaganda an alarming proportion of the fourteen million foreign-born aliens are drawing their money from the banks, selling their liberty bonds and houses, and returning to Europe. . . . It is estimated that about 1,300,000 cannot be stopped from going, and that they will carry with them nearly $4,000,000,000 or four-fifths of the total currency in circulation and in reserve in the United States before the war." '

Such credulity is not confined to Bankers' Associations. It is common among persons of all classes. In the United States I met a prohibitionist recently, who told me with absolute

assurance that the reason the Germans lost the battle of the Marne was because they all got drunk on champagne while going through a wine-growing district of France. Socialists are just as credulous as conservatives. Listen to any soap-box speaker, and you will get an amazing account of all sorts of diabolical conspiracies which the capitalists are alleged to be perpetrating. In fact it is this willingness to accept as fact whatever is repeated often enough, that makes the public the easy victim of all sorts of propaganda. The first requirement for sound thinking is that one develop *habits of doubt*. No one can learn to think until he has first learned to doubt.

Another cause of routine thinking is our natural inertia. People are intellectually lazy. Most men would rather make violent physical effort than exert themselves mentally. Thinking requires effort and some degree of risk. In thinking there is always a period of suspended judgment. It is much easier to go on with our minds made up than to revise our pre-suppositions. Once we have settled a thing, we wish never to be made to question it again, particularly if we have long believed it and have associated many other things with it. Whether one is a liberal or a conservative he is as likely as anyone else to reduce his thinking to a set formula, and to cling to it with all his might. As Dewey quotes Locke, 'There are men whose intellect is cast into a mould and just fashioned to the size of a received hypothesis.' In other words, people of different shades of opinion often hold their pet ideas as watch-dogs, which are kept about for the sole purpose of running out and barking and scaring other ideas away. So an idea once accepted becomes a going concern. One lives with it so long that he gets the habit of it.

One may repeat a story which in the beginning he knew was not true, but after repeating it again and again he will come to believe it. I knew an old American soldier of this type once. He had passed through the Civil War uninjured. In the early nineties, the government was very liberal with pensions, especially to those men who had their health

impaired during the war. This particular veteran finally remembered that during his encampment in the South, he once had an attack of indigestion. It was after he had eaten some mince pie baked by a Southerner. At first he said that perhaps there had been some poison put in the pie; later he said the poison must have been powdered glass; finally that it was powdered glass. For several years he told how during the war he had eaten powdered glass and finally, in all good faith, he applied to the government for a pension and received it on the ground that he had been injured in this way while in the service. To-day nothing in the world could make him doubt this story. He is a wounded hero.

There are many people who hold their religious and political convictions in such a manner. They have repeated for so many years the stock phrases of their faith, that the mere repetition of them finally fixes certain language habits and in the end what was once held with very little conviction becomes a fundamental. After a recent lecture on Eugenics, in the course of which the lecturer had mentioned our duty to future generations, a kind-faced old man came up to the platform and said, 'But, professor, there are not going to be any future generations. The book of Daniel says . . .' In the same way causes that have once been fought for, persist long after the battle is won or lost. There are women who worked for suffrage who now, though they have won their cause, are still militant for 'women's rights.' There are people who go on repeating religious beliefs of various sorts a whole half-century or more after the consensus of intelligent and scientific thought has rendered them untenable. I am sure that with a little effort one could find in almost any community a number of persons who still believe that the earth is flat.

Thus our beliefs come to take on a ceremonial character. One who has had much experience with public discussion comes to be deeply impressed by the fact that many persons see in discussion, not an occasion for inquiry, but merely

an opportunity for standing up and repeating their creeds. Every cult and party tends to stereotype the minds of its adherents, so that in the end the same phrases are likely to be repeated by most of the members and in almost the same tones of voice. Thus there is a typical revivalist sermon; a typical socialist speech; a typical argument for Protection, and so on.

Not only is much thinking paralysed by the habits of routine which we have just discussed, but there are also many instances where opinion is determined, not by the evidence in the case, but by factors which are quite irrelevant. There are many subjects which we cannot bring ourselves to investigate with an open mind, because we fear that our conclusions may compel us to revise some other belief which has nothing directly to do with the subject. I know persons who will not read Freud, because they fear that he may cause them to become critical in respect to certain conventional and authoritative beliefs they may have about ethics. There are other persons who refuse to approach the study of biology with an open mind, because they fear that if they should accept the doctrine of evolution they might have to change their preconceived notions concerning the meaning of the book of Genesis.

This irrelevancy may sometimes have serious consequences, as when certain municipal or school authorities in America demand a revision of the accounts in history text-books of the American Revolution. These men are not so much concerned with the truth of these accounts as they are motivated by their hatred of England. England must always be wrong, in every detail, and any facts which cause us to question this notion are wicked facts, and a good patriot should neither write nor read about them. It is interesting to see how this irrelevancy influences even intelligent men. If you tell me a person's belief about social problems, whether he is a socialist or a liberal or a conservative, I will undertake to tell you what he will think concerning the purely biological question

of the inheritance of acquired characters. And in most cases I am sure I should be correct. Now, of course, the question whether acquired characters are inherited must be settled on biological and not sociological ground. Yet such is seldom the case with the average man. Men very often believe or refuse to believe a thing, not because they have made an effort to find out if it is so, but because of the effect of that belief on their favourite theories. The love of truth is rare. What men love is their own 'truths,' that is, their *opinions*. People who cannot love truth itself, cannot think, because they cannot pay attention to that which is relevant. It is necessary, therefore, if we are to develop habits of correct thinking that we keep to the point. We should carefully watch ourselves to see if we are permitting our thought to be drawn from the recognition of facts by interests which have nothing to do with the case.

The third hindrance to habits of correct thinking is what psychologists call *rationalization*. In our chapter about Freud we saw that rationalization is not solving of problems. It is an invention of plausibilities by which behaviour that is motivated by unconscious impulses or repressed wishes may be made to appear to consciousness as reasonable conduct. Much of our rationalization consists in the fabrication of mechanisms the function of which is to invent ideal consolations or imaginary escapes from realities, or justifications of anti-social behaviour trends. Thus when a nation making war upon its neighbours persuades itself that it is the innocent and injured party, and that it is interested only in peace, the thinking of that nation on that subject is rationalization. I find a beautiful example of rationalization in to-day's newspapers. An announcement is made that an army officer will give a lecture to-night on the subject, 'The Benevolent Uses of Poison Gas.'

Many of our rationalizations have the function of preserving our egotism. We wish to feel ourselves important and therefore, if there is anything which arouses in us the feeling of

inferiority, our thinking about that subject is sure to be characterized by rationalization. Thus people who live in rural communities and are made to feel 'countrified' when they come to town, very often believe that all large cities are 'wicked.' So persons who cannot understand or follow difficult scientific discussions frequently preserve their self-appreciative feelings by denouncing the scientists as fools or as enemies of religion. Crowdmen always have a habit of preserving their crowd ideas in the face of contrary evidence by denouncing the person who does not agree with them. The very existence of such a person is a witness to contrary evidence, and his testimony must be discredited. So, many prohibitionists believe that if one does not accept their doctrine, he is 'bought up by the liquor gang.' And there are socialists who hold that if one is an individualist, it must be that he is either a coward or in secret league with the capitalists. It is a common habit with religious sects to hold that unbelievers are wicked persons who should rightly be punished with hell-fire.

Sometimes our rationalizations take on elaborate ramifications. There is much rationalization of this sort in the old nineteenth-century humanitarian doctrine – still held by many – that man is by nature good, and that if anyone is bad or ignorant or foolish, it is only because he has been held down by a wicked master class, or by a vicious environment; that all that is necessary to make everyone good and wise is to improve the environment. Of course, this thinking may have in it a measure of truth, as much rationalization may, but its real function is frequently that of justifying belief in an ideal commonwealth of some sort. And the very ideal of such a commonwealth is for many persons a rationalization of the wish to return to the golden age of childhood; in other words, it is frequently a rationalization of what the Freudians call the 'infantile return,' or fixation upon the mother image.

Finally, there is rationalization which has the function of justifying anti-social behaviour. If a mob lynches a negro or

sets out to tar and feather some helpless victim, it always persuades itself that it is motivated, not, as it is, by a love of cruelty, but by the loftiest of moral principles. Rationalization is really *compulsive thinking*, and by compulsive thinking I mean that there are many thoughts which persons both normal and abnormal entertain because they cannot help entertaining them. Such persons can never be convinced by evidence. They resent anyone who calls their attention to the facts because rationalization is not concerned with facts. *It is an attempt to escape from fact.*

The student should cultivate the habit of noticing when his thinking and that of other persons is rationalization, and when it is problem-solving thinking. Civilization to-day demands problem-solving in ways that it never demanded before. Our life is so complex that it is impossible for us to carry on very long with the mental habits of earlier and simpler ages. Science has re-organized our life theoretically and practically. At the present time science has been accepted by the public in respect to its *products* rather than in respect to its mental *processes*. Unless a very large number of persons can learn to live through these thought processes, we shall have a new sort of class distinction among men. It will be necessary then for a large portion of the race to have its thinking done for it by the few. In that case, democracy will no longer be possible. Every one who develops the problem-solving habits of thinking, rather than habits of routine and rationalization, not only enriches his own life, but performs a most valuable social service.

CHAPTER TEN

THE VALUE OF THE FICTIONS WE INVENT ABOUT OURSELVES

§ 1

PERHAPS a very strict exponent of behaviour psychology would object to this chapter, on the ground that both the subject and the treatment of it are too introspective. We must discuss our habits of thinking about ourselves. Hence, I suppose, we are dealing with some phases of the topic which appears in conventional psychologies as 'self-consciousness.' In Watson's book, *Psychology from the Standpoint of a Behaviourist*, there is no mention of either self or consciousness. The author believes that these words, together with such words as 'soul' and 'spirit,' indicate that psychologists are very much confused regarding personality. He takes a purely objective view of personality, and argues somewhat as follows: that personality is the total integration of an individual's reaction tendencies – that is, it consists of his basic habit formations.

The behaviour psychologists are interested only in the way the individual behaves when his organism as a whole is at work. The individual is likened to a gas engine. If all the various mechanical parts are properly adjusted, the engine will work in a certain way. 'Knowing the part reactions of individuals, and how they have functioned as a whole in past situations, enables us to draw legitimate inferences as to how they will act when the new situation confronts them.' Beyond this interest in predicting and controlling the behaviour of people, Behaviour Psychology has little concern.

But if we take the standpoint of psycho-analysis, we see that the behaviour of people is very much determined by what they think about themselves. In fact, there is probably nothing more important in all our thinking than just that. People are constantly thinking about themselves. Perhaps there is nothing about which they think so much. Freud

shows that in dreaming, we are always the heroes of our dreams. As we noticed in the chapter on Freud, the dream is very much disguised, so that unless one knows something of the technique of dream analysis, he might not easily be convinced that certain dreams are really about himself. This, however, seems to be the case, and it is quite evidently shown in such common dreams as those in which one is falling or flying, or taking a journey, or out in the street only partially clothed. Inasmuch as our dream thoughts are expressions of many of the deepest tendencies in our nature, this preoccupation with self is significant.

The same is true with day-dreams. Catch yourself in some moment of reverie, and note what you are thinking about. It is quite likely you will discover that you are thinking about yourself. You are imagining yourself in some heroic rôle, or playing with the idea of yourself as an important and successful person, or are in fancy enjoying yourself in one way or another. Many of our reveries are devices for escaping the realities of life and moulding them nearer to our heart's desire. The ambitious dreams of youth are all of this nature. The young man with political aspirations seldom deliberately calculates the objective good he may do in performing the duties of his office. He does not forget himself in contemplating the needs of his country. He is thinking about his future career. He pictures political campaigns, his photograph being carried in a political procession, himself making speeches to large cheering throngs. The young lover does not merely lose himself in reverie about his beloved. He imagines all sorts of scenes in which he appears heroic to her. Perhaps her house will take fire and he will rush in at the risk of his life and rescue her while all present applaud the brave deed. Even in our most unselfish meditation, there is a large element of thinking about ourselves. The idealist, dreaming of a better social order in which all men may be happier and more kindly, nevertheless finds satisfaction in the thought that in some way his own acts may help bring

about this better world; that is, he conceives of himself as a saviour of the world. Notice the appeals to such fancies about ourselves in the advertisements of those books and courses of study which advise gullible persons how, by some magic, they may become cultivated, successful individuals with pleasing personalities. In fact, this wish for instantaneous and magical self-transformation is so wide-spread, that persons who want to make easy money often cannot resist the temptation to play upon it.

Notice also how we love to appear important. We love titles. We wish to impress ourselves upon people. On trains you frequently find people who make the most serious effort to create a good impression upon persons whom they have never seen before, and know that they will never see again as long as they live. In fact, we strive very hard for the good opinion of people, whose opinion about every other subject except ourselves we may absolutely despise. We cannot bear to see the image of ourselves shrink before the eyes of anybody. We love to see our names in print. If we know that our name is to be included in *Who's Who*, we probably subscribe to the next issue. One of the reasons why there is so much advertising to-day, is that business men love to see their names, and the names of the products which they make, plastered on the hoardings and written in letters of blazing light in the night sky. Even philosophers cannot escape this all-too-human tendency. Schopenhauer was furious because Hegel was more popular than he. Nietzsche, after saying many times that the philosopher must be a higher man, aloof and alone, despising the judgment of the multitude, was tremendously grateful when Georg Brandes, the arbiter of literary fame in Europe, at last gave him recognition. One reason why people forget names is that they are all the time thinking about themselves. If you want people to look at a thing, put a mirror on it.

Hume raised the problem whether man is ever capable of a disinterested act. He settled it in the affirmative, and I

think correctly so, for the self that we are so concerned about is not often the self of our gross material interest, but is more frequently the idea which we have about ourself. It is doubtful if anyone can or ever does really accept a low estimate of himself, or think of himself as a total and absolute failure or inferior. Always there is some consoling thought, some compensation or protest. It is true that we all have the 'inferiority complex,' to some degree, but there are few of us indeed who do not, as a consequence, make much of the virtues we do happen to have. I call such virtues 'virtues of extenuation.' To be sure, there are abnormal persons who may, and sometimes do, entertain such a low estimate of themselves. But such persons are suffering from a depression, and their thought of themselves is a symptom of a disease known as *melancholia*. Julius Cæsar, the 'greatest man of antiquity,' lost his life because 'Cæsar was ambitious.' Even the saints, who perform the most heroic acts of self-denial, are yet not adverse to the thought that they are saints, and it is among these religious spirits that belief in the immortality of the soul is strongest. We are so interested in ourselves that we just cannot imagine the universe continuing to exist without us. Hence, the thought of self is an important element in human life.

The self ideal is an object with which we are tremendously preoccupied. I shall treat self as an *object*, not as a *subject*. The older thinkers were inclined to regard self-consciousness as a subjective feeling. James says that this feeling is purely objective. This may be a new point of view to many who have been in the habit of thinking of 'self-consciousness' in the old subjective way. James says that the self of which we are conscious is just as truly an objective thing as are any of the things about us which we see and touch.

§ 2

WHAT WE MEAN BY SELF

What, then, do we think about, when we think about ourselves? First, let us notice that this self cannot be an 'original datum,' by which I mean that it is not a given subjective or spiritual entity of which we have any innate or immediate awareness. We have no a priori intuition of self. Kant speaks of the transcendental ego and the empirical ego. By transcendental ego he means a mysterious principle of personality, the 'pure self,' which exists outside of experience. He says we can never know this pure self. The self we know is the *empirical self*, or the self which is the object of experience. This self belongs to the 'phenomenal' world. That is, it is conditioned upon human thinking, and suffers from the inevitable errors and limitations of such thinking. It does not correspond to reality.

I do not wish to approach the subject in Kant's way. Let us take a genetic view of this problem; that is, let us trace the development of the idea itself from infancy on, and we shall see that this idea is not inborn, it does not come suddenly; it is a human construction, a hypothesis, if you will. There is no evidence that a child opens its eyes on this world and thinks: 'Behold me, I am a soul, an ego, a unique spiritual fact.' A child may become a unique individual, or tend to approach it in later years. But no invisible soul enters into it with its first breath. It is doubtful whether the human infant has any feelings about itself that are different from those of other young mammals. Like the others, it is born with various reflexes and bodily feelings. But these are not yet integrated into any sort of individuality. A little child is occupied with its various specific organic responses, and it is a long time before even these specific responses, except the most elemental ones, are integrated into behaviour patterns in which the whole organism is deliberately and consciously

involved. It is many months before the child succeeds in discovering its own body, or recognizes that its various organs belong to the same person.

The child must first get an image of its physical organism as a whole, and it is doubtful if we ever quite succeed in doing this even in adult life. We have no very clear idea of our own appearance. People who have once been slender and suddenly grow stout, often continue to think of themselves as sylph-like. Also, it is difficult for us to take in the fact that we are beginning to look old. We are surprised, often a little disillusioned, when first we find that young people take it for granted that we are members of the older generation.

Again, to have a sense of self, the child must develop a feeling of the continuity of its stream of experiences. I mean, it must be able to refer its past experiences to its own past. Here, too, success is never absolute as it would be, if self were a given object complete from the beginning. There are certain incidents which happened in my childhood, and to this very day I am not sure whether they happened to myself or to my brother. I am sure many other persons have such confused memories. There is an enormous amount of repression going on in the first years of childhood, and this repression is a kind of forgetting. Psychopathologists have only recently come to understand how much we have each forgotten of those early years. It is possible through the technique of psycho-analysis to restore many of these memories. Surely then we should expect to find that the sense of self in these early memories is slow-developing and often vague. Again, the child who has a full sense of self must be able to *place himself correctly* as a member of the family, of the community, and so on. He must acquire the habit of responding in a certain way to his name, and using correctly the personal pronouns. I am sure that very much of our sense of self depends upon this. Little children very frequently speak of themselves in the third person, even after they learn to talk fairly well. Consequently, before an idea of the self can be

entertained, a child must have developed language habits. The idea of the self, therefore, is *learned*. It is a habit, and is acquired in much the same way that other habits are acquired.

Similarly, if the idea of self is learned, it is not the object of *instinctive* knowledge. We hear a great deal about the ego-instincts in psychology to-day. The Freudians particularly seem enamoured of this concept. One may speak of such an instinct, only if he wishes to include in his concept of instinct in general, the element of knowledge or of feeling. Thus it is sometimes held that this ego-instinct is a sort of three-dimensional affair, having its cognitive side which is instinctive self-knowledge, its affective side, which, according to McDougall, consists of two opposite feelings, the positive self-feeling he calls 'self-appreciation' and the negative self-feeling he calls 'self-depreciation.' Finally, there is the *conative* side of this instinct, which consists of the acts which one is instinctively impelled to do in the interests of his ego.

Freudians correctly diagnose many forms of abnormal mentality as symptoms of a disturbance of the ego. I do not, however, believe that such diagnoses necessarily or correctly demand that we should assume the existence of an ego-instinct. It is only necessary to say that such abnormal phenomena are the result of *wrong thinking* about ourselves. What I said about instinct in the chapter on that subject applies to the so-called 'ego-instinct.' Let us again follow Watson, who has dealt with the subject of instinct in a manner free from the confusion which characterizes the usual treatment of the subject, and let us remember that by the term instinct we mean 'an inherited mode of response of the pattern reaction type.' This view of the ego-instinct necessarily excludes habit and learning; in other words, the element of knowledge of self.

Whatever self-interest may be, then, we probably have no right to assume the existence of an 'ego-instinct.' When we look for the patterns which are concerned with the self or

ego, we see that there are none directly concerned with the ego as such. The patterns wherever found will be those of mere instinctive behaviour toward certain outside objects. Let us note the so-called instinct of self-preservation. As James showed, this is a pure abstraction. We cannot conceive of animals as motivated in their acts by such general ends as these. An instinct is always a specific response toward some definite object. When an organism runs away from a dangerous object, we may say his action is instinctive flight; when he seeks food, we may say that his action is characterized by instinctive hunger. Now it happens that these instincts and many others have *survival value*. The instinct of flight, for instance, may preserve the life of the organism. So will the instinct to fight, on certain occasions. Let us characterize these instinctive acts for what they are. Why say that they are also the instincts of self-preservation? Psychologists who say this would seem to be merely abstracting the element of survival from various instinctive actions, and making out of this abstract element a separate instinct.

§ 3

SELF-FEELING IS OBJECTIVE

Self-knowledge, therefore, if it is knowledge, is neither instinctive nor intuitive. No unique datum is given in either of these ways. What then do we think when we think about ourselves? Do we think about anything at all? Is the object of our thought merely illusion? I do not think so. It contains many elements, and is probably more in the nature of an inference than of an immediate awareness of any one object. James says, 'Certain things, objects, appeal to our instinctive primitive impulses. These objects our consciousness treats as the primordial constituents of its me. . . . Whatever other objects, whether by association with the fate of these, or in any other way, come to be followed with the same sort of

interest, form our remoter and more secondary self. The words " me," then, and " self," so far as they arouse feeling and connote emotional wealth, are objective designations, meaning all the things which have power to produce in a stream of consciousness excitement of a certain peculiar sort.'

'We see no reason to suppose that self-love is primarily or secondarily or ever love for one's mere principle of conscious identity. . . . Its own body, then, first of all, its friends next, and finally, its spiritual dispositions must be the supremely interesting objects for each human mind. . . . If the zoological and evolutionary view is the true one, there is no reason why any object whatever *might* not arouse passion and interest as primitively and instinctively as any other. . . . I might conceivably be as much fascinated and as primitively so by the care of my neighbour's body as by the care of my own. The only check to such exuberant altruistic interests is natural selection, which would weed out such as would be very harmful to the individual or to his tribe. Many interests, however, remain unweeded out – the interest in the opposite sex, for example, which seems in mankind stronger than is called for by its utilitarian need – and alongside of them remain interests like that in alcoholic intoxication or in musical sounds, which for aught we can see are without any utility whatever.'

'An original central self-feeling can never explain the passionate warmth of our self-regarding emotions, which must, on the contrary, be addressed to special things, less abstract and empty of content. To these things the name of self may be given, or to our conduct toward them the name of selfishness, but neither in the self nor in selfishness does the pure thinker play the title rôle.'

James further says that the sense of personal identity is the sense of sameness perceived by thought and predicted by things thought about. It is exactly like any one of our other perceptions of sameness among phenomena. When we say, then, 'I am the same as I was yesterday,' we say so because

there is a certain similarity in the two selves thought of which leads us to identify them logically. There is nothing different in this from my saying that my table is the same as it was yesterday, except that in the case of my personal identity the element of sameness is known to me in the form of a certain bodily feeling, but this bodily feeling is just as objective as my sensation of any other object. James in treating of the empirical self says that in thinking of it we really are thinking about certain objects toward which we feel in a certain way. We have a peculiar interest in them, so that when they succeed we feel happy and important, and when they fail we feel that something has vanished from our inmost life. These are objects which can never be regarded as mere means. They seem to be ends in themselves, they are objects which we do not share, and hence the contemplation of them gives us a sense of individuation. In this way, objects which in themselves would never be associated at all, perhaps come to be stamped with this peculiar emotional interest we have in them, and to take on the character of a personal identity. James, in dealing with the subject of self, shows that we have really many selves, the 'material me,' the 'social me,' and the 'spiritual me.'

James says that the body is the inmost part of the material self in each of us. He further adds that we identify ourselves with some parts of the body more than with others. Yet it cannot be denied that we think of our whole organic existence as ourselves. The pride and sense of self-esteem which many people show in their physical appearance is well known. Something of this we all have. Much of our egoism can be traced back by psycho-analysts to forgotten exhibitionist tendencies of infancy. There are certain bodily defects concerning which almost anyone would feel a sense of shame, a shrinking of the self. With bodily importance go also our clothes. Many a person poorly clad feels a sense of inferiority, and the reverse of this is true also, for many people find in extravagant dress a protest against the feeling of inferiority.

This identification of ourself with our clothes leads to a very common form of speech. Let one put on a new article of clothing and the first person met will be asked: 'How do I look?'

There are religious sects who seek to minimize this 'bodily me,' who fight against it and humiliate it as if it were the enemy of the other 'mes.' Such religious practices are known as 'asceticism.' Speaking from the standpoint of psychology, asceticism may be analysed into something more serious than mere hostility to the body. It contains an element of hostility toward life itself, and is closely allied with those neurotic symptoms which psychologists designate as diseases of the ego, due to a withdrawal of vital interests from certain objects, because the subject is unable to react to them with emotional adequacy. Thus it is apparent that the bodily self is deeply involved in the whole behaviour of the ego.

James says that along with the body, the 'material me' includes also our possessions. There is no clear-cut distinction between 'me' and 'mine.' Popular speech gives evidence of this fact in the common saying that a man is 'worth' so and so, when it is meant that he possesses a certain amount of property. Let the average person suddenly come into the possession of wealth and the enlargement of his ego is easily noticeable. In fact, this is one of the most common devices for seeking self-importance among mediocre people, and accounts for that over-stimulation of men's ambitions for material success so characteristic of democratic civilization.

The *social self* or 'me' is the recognition one gets from his fellow-beings; in other words, it is the reflection of our image in the attitude of other people to us. We are deeply concerned about what people think of us, and are likely to assume the behaviour patterns and accept uncritically the opinion of persons who make up the group to which we belong. As James says, our good or evil opinion of ourselves depends largely upon this social recognition. We love to be *in* things. Even Cæsar loved flattery. 'No more fiendish punishment

could be devised, were such a thing physically possible, than that one should be turned loose in society and remain absolutely unnoticed by all the members thereof.' We always feel inferior if people cut us dead.

James further says that, properly speaking, men have as many social selves as there are individuals who recognize them. But, inasmuch as one's contacts with individuals take place in certain group associations, we may say that one has as many social selves as there are groups to which he belongs, and we may further say that his self-appreciation is not a uniform thing, but varies according to the standard of honour that obtains in this or that group. Thus, the non-combatant feels no sense of dishonour in fleeing as a refugee before an invading enemy, but the soldier's honour demands a different type of behaviour. Much of the inconsistency in human behaviour grows out of the different social selves which are competing in us for mastery. The traditional deacon who is pious on Sunday and cheats his neighbours on weekdays is not necessarily a hypocrite, but a victim of conflicting social selves. He is not very different from the small boy who is very demure and obedient at home under the watchful parental eye, but who, when out among his schoolboy associates, will swear and swagger and smoke cigarettes. Honour in the boy-world may demand that sort of behaviour, but not so honour at home. For this reason it is doubtful if the behaviour of anyone is consistent. The point, however, is that we get our sense of self very largely from the people with whom we associate.

The 'spiritual self' is simply, as James says, our thought of ourselves as thinkers; in other words, it is that sense of self that comes from contemplating our own mental processes. The feeling we have here, like all emotion, as James says, is bodily feeling and is, therefore, objective in the same way that the feeling about our other selves is objective.

Out of these various elements which go to make up our thought of ourselves, some order or integration must be

achieved. First we arrange the selves into some scheme of relative importance. Some things in us will give us a keener sense of importance or inferiority than other things. This James calls the '*hierarchy of the mes*,' and he says that we achieve it very largely by means of a process of selection. Choose a self and stand by it, he says. 'A tolerably unanimous opinion ranges the different selves of which a man may be "seized" and "possessed" and the consequent different orders of his self-regard in a hierarchical scale with the bodily me at the bottom, the spiritual me at the top, and the extra-corporeal material self and the various social selves between.' Of course, in all this there is rivalry and conflict. 'Not that I would not, if I could, be both handsome, and fat, and well-dressed, and a great athlete, and make a million a year; be a wit, bon vivant, and a lady-killer, as well as a philosopher, philanthropist and statesman, warrior, an African explorer, as well as a tone poet and saint. But the thing is impossible. The millionaire's work would run counter to the saint's; the bon vivant and the philanthropist would trip each other up; and the philosopher and lady-killer could not keep house in the same tenement of clay.' At the outset, perhaps, various of these rival selves might be possible to us, but as we mature and develop certain habits, these possibilities are closed and we settle down to a relatively harmonious group of selves with one of them predominant, and on this we stake our salvation, reckoning it no shame to fail in any of those not adopted as specifically our own.

§ 4

THE CONSTRUCTION OF THE 'PERSONALITY PICTURE'

From a somewhat different point of view, I wish to discuss this gradual adoption of a self as our own. I should say that a self which we habitually appropriate is in a way not so much adopted as created by us. It is a character sketch which we

spend our lives in drawing. The term which I prefer to use is *personality picture*. In a sense, we are each an artist, spending his life painting an imaginary portrait of himself. We are, by our deeds and choices, really writing our autobiography- and this autobiography, like all others, is a work of fiction. It is a necessary fiction, however, and the success or failure of our life depends on how good an imaginary portrait we paint; in other words, how well we succeed in making our life a work of art.

We begin in a fumbling way, as children begin to learn to draw. Slowly and with much effort and erasing, with many a wrong stroke, we acquire greater skill, and the details of the features gradually appear with ever greater and greater distinctness. At first we do not know just what the picture is which we are to spend our life in painting. The very plan and form of this picture is created as we go along, until we reach the place finally where we see what it is we are painting, when it is generally too late to impose upon it another character, and we are left with the task of perfecting the one we have started.

Dr. Alfred Adler, the Viennese psychologist, uses the terms 'imaginary goals' and 'fictitious guiding lines.' He says that such an imaginary goal is created, beginning with early childhood, as a protest against the feeling of inferiority. A child, for any reason whatsoever – its weakness, smallness, bodily defect, real or imagined backwardness, may feel himself to be inferior, and so he begins to protest against the self-depreciative feeling which accompanies all such thoughts. He forms a habit of comparing himself with other persons, of testing his powers. In imagination he identifies himself with those he admires. He entertains an ideal of the man he would like to be and imagines himself to be that sort of person in anticipation of his attainment of the ideal.

Brill has shown that everyone has what he calls an 'emphatic index.' By this he means that it is possible for a psychologist to discover who the person is with whom each of us uncon-

sciously identifies himself. Many identify themselves with Napoleon. Others, with Lincoln or George Washington, or Theodore Roosevelt. One may often notice the Napoleonic frown on the brow of a business man, which is his way of telling the world that he considers himself a 'Napoleon of finance.' One frequently sees men who make an effort to smile and show their teeth like Theodore Roosevelt. Now these forms of identification are not confined to superficial gestures. They determine the guiding line which one follows through life. Sometimes the identification is with the parent images, and in such cases there frequently happen the unfortunate results which we saw in the chapter on Freud.

Adler says that when we make our choices, we do not accept or reject things because of their intrinsic worth, but because we have referred them to our personality picture. If they seem to be the kind of things that the individual we have created in this picture would do, we say yes to them; if not, we reject them, and, if this is impossible, we repress them; that is, we ignore their existence, whether they exist as tendencies in ourselves, or as facts in our environment. This is the function of the personality picture. It is an *instrument of orientation*, by which I mean that its function is to give us a basis for locating ourselves among the possibilities of experience, so that our course of life takes a certain direction. This is supremely important for us, for otherwise our existence would be a complete chaos.

So important is this function of the personality picture that we may well say that it is the most important thing about us. The reason why men guard it so carefully and are so upset if anything defaces it, is precisely because it is a vital instrument of choosing. When it functions properly, we know what we want. We can sustain a purpose, achieve a career, become a personality. Thus the personality picture is our 'character,' our empirical 'soul.' The deepest truths of religion have something to do with our attempts to preserve this personality picture. The sense that we have not painted

the picture which we believe we ought to have painted is called the feeling of sin. The desire to preserve the picture, to see it beautiful and clearly drawn, is the longing for the 'salvation of the soul.' The reason men resent insult and cannot bear the feeling of inferiority is because these things tend to mar and disfigure this picture which they so carefully guard.

When I say the picture is *fiction*, I do not mean that it is all fiction. Of course, it is founded on fact, but nevertheless it contains, just as in the act of choosing a career, much that is anticipated, much that is pure desire, much self-idealization. One important difference among men is the manner in which they strive to preserve their personality picture intact. Adler says that the neurotic individual invents an imaginary goal for himself which it is beyond his power to achieve. This goal, however, gives him consolation. He strives in every way to secure himself in it. It becomes an imaginary *refuge from the real*. He invents all sorts of devices to preserve it from the realities which would challenge it. Finally, he builds for it a castle in Spain within whose impenetrable walls of fancy he lives with it in seclusion, sequestered from the contemplation of any reality which would cause him to face the facts about himself.

Such persons are psychopathic. Their one aim in life is to defend their ego-fiction. They preserve their personality picture static, unmodified by experience. They fail to live genuinely because in all things they are merely seeking to save their spiritual faces. Their picture ceases to be an instrument of orientation. It draws them away from the tasks of life toward an asylum in which the picture is an end in itself. Healthy-minded people are able to revise their personality pictures in the light of experience. They seek to preserve them, not by keeping them static, but in activity. They are capable of self-criticism. They learn to think not merely for the sake of thinking away that which conflicts with their ideal of themselves. They think in order to *solve problems*, and the

courageous facing of any fact or the solution of any problem leaves its imprint upon the self-ideal so as to develop and strengthen it.

§ 5

THE EMOTIONS ASSOCIATED WITH THE SELF-IDEAL

Dr. Bernard Glueck gives us a list of four types of emotions which are associated with the desire to keep up the ego-ideal. First, there is the desire for new experience. I should call this the desire for adventure. We hate humdrum and monotony and grow tired of ourselves when such is our lot. We feel ourselves to be mediocre, when caught in a dull routine. There is a sort of self-expansiveness in the sense of adventure. This is why men pursue game, love to travel, read stories of romance and make of the pursuit of knowledge an adventure. Much depends upon the sort of thing one forms the habit of making his adventure, and here the personality picture comes to be the deciding factor. When life ceases to be an adventure, there is a distinct psychic loss – a listlessness, inattentiveness, a withdrawal of interest which psychopathologists describe as 'an introversion of the libido.' The vital interest turns from objects to which the individual can no longer react with emotional satisfaction, and is directed inward toward the ego ideal itself. In such cases, there is commonly a serious disturbance of the whole personality.

The second emotion which Dr. Glueck points out, is the desire for security. Not mere physical or economic security, but the security of the ego-ideal. We have already dealt with this point, but I should like to add a word about the social significance of this desire. Much depends upon the way in which this security is sought in society, whether by a dull conformity to convention, or by training people in habits of self-mastery, which is, after all, mastery over something in the environment. It is coming to be the fashion to try to

secure character by removing temptation. If a cinematograph film suggests to the neurotic individual an erotic impulse or the idea of committing a crime, we must have a solemn censorship over all such public entertainments. If a work of fiction or even a literary classic disturbs a moron, we have a 'banned book.' If a neurotic cannot pass a public-house without going in and becoming intoxicated, cultivated people may no longer serve wine at their dinner tables. From the standpoint of social psychology, this is a wrong-headed method of procedure. It simply forces upon all people the moral dilemmas of the most inferior. A community, like an individual, is known by the dilemmas it keeps. The removal of temptations does not develop character. It simply represents the survival values of lower types of men.

A third desire associated with the ego is the desire for recognition. Under this head are listed various devices for achieving distinction in the eyes of the public or attracting attention to ourselves – ambition, arrogance, vanity, and so on. Perhaps envy should be listed under this head also, inasmuch as it is frequently the vanity of the unsuccessful. When this desire for recognition consists merely in such things as 'fishing' for compliments, love of praise, it is not very serious. When it compels persons to strive for real distinction of worth, it is, of course, a wholesome and natural thing. It is very likely that a society, when it loses its sense of distinction among men, will lose the very basis of its cultural value. The desire becomes psychopathic when it leads to the delusion of grandeur or the delusion of 'reference.' The former delusion needs no explanation. There are individuals ranging all the way from normal persons to lunatics who are the victims of such delusions. Conceited persons of this type are common, and their conceit is very commonly a self-defence against a feeling of inferiority. The delusion of reference is a term used by psychologists to describe the behaviour of persons who think that everything said and done by the persons in their environment has some

special reference to themselves. A common form of this delusion exists in most of us. If we hear a number of persons near us laughing, it is often not easy to dispel the idea that they may be laughing at us, even when there is no evidence that this is so.

Finally there is the desire for response. This is not quite the same as the desire for recognition. It is the wish for something more intimate. How many people there are who feel that they are 'not understood.' We wish somebody to understand us, to love us. Romantic love, domesticity, friendship, are all features of this desire. Its negative reaction types are home-sickness and loneliness. There is an abnormal form of this desire which sometimes occurs when the individual finds himself not at home in the environment of mature life, and returns in imagination and fixes his emotional interest upon the parent image. Persons suffering from this infantile return are frequently unable to give themselves with any genuine emotion or affection to the love of anyone, however much they may desire to do so. Perhaps in such cases the desire for response is too strong, so that the individual never wholly detaches himself from the memory of the time when his ego found satisfaction in the fact that he was the most important person in the world to his father and mother.

In all these things and in many others, the drama of life centres about the fictions which we invent about ourselves. Many social movements, political ideals, religious practices, reforms, utopian dreams, have the function primarily of defending the ego against the inferiority complex. Enormous groups of men, finding their ego fictions similarly challenged, form crowds of one sort or another, comprising sometimes whole classes and nations. I have shown in another connection that much of the thinking of crowds, their dogmas and propagandas and panaceas, does not solve environmental problems, but is a collective face-saving device. We should learn to recognize these protests in ourselves and in others. They are not always easily recognizable for what they are,

because they assume such pompous forms of disguise. The trained mind, however, will learn to pierce through these disguises, recognize the ego-interests for what they are, face the facts about himself, and strive to form such habits of thinking as will keep his ego interest normal. After all, one thing is certain: no civilization or social order can easily survive which offends the ego-feeling of too large a portion of the population. Men will always resent exploitation, tyranny, and coercion, because it gives them an inferiority complex to be ordered about. 'That government is best which governs least.' This statement is still psychologically true. There should be the very greatest caution in resorting to coercion, even for the sake of the most moral ends. The moral ends proposed may turn out to be mere justifications for somebody's wish to lord it over his neighbours and to be important. We place too much emphasis upon social control these days. Normal selfhood can exist only where there is freedom.

CHAPTER ELEVEN

THE UNCONSCIOUS AND ITS INFLUENCE ON HUMAN BEHAVIOUR

§ 1

If what I said in the previous chapter about the self is correct, there is more in our nature than we ever succeed in organizing into a conscious self. As we have seen, the 'personality picture' is really a selection. It is a form of self-idealization. It necessarily leaves out many things which, while they are incompatible with it, are nevertheless parts of our being. We saw how important this matter of selection is. As James said, when we are very young we may become one of any number of possible selves. As we grow older we 'choose a self and stand by it.' I do not mean that we consciously and all at once decide that we are to be a 'saint' or a 'philanthropist' or an 'African explorer' or a 'lady-killer.' The formation of our personality picture, or imaginary goal, is a gradual process, beginning with a very vague and dimly outlined dominant tendency. As the personality picture becomes constructed, it acts to check tendencies in our nature which are hostile to it. Many of these tendencies are such that they are really unacceptable to consciousness. Therefore, they are put out of mind. We finally cease to attend to them, and 'repress' them.

This fact of selection, as James says, is essential to the psychic life. Our sense organs are such that we respond to only a very small number of all the movements of matter which might stimulate us. There may be countless forms of vibrations about us, like the wave-lengths which carry radio messages. We have no way of reacting directly to such vibrations, but it is conceivable that living beings might exist which would respond to various electrical wave-lengths with as definite sensations as we have in responding to light waves. Even of the few kinds of stimuli to which we do respond, we select a very narrow range. Light waves other than this small

number – those, for instance, that are longer or shorter than the waves in the solar spectrum – we cannot see. Of the sensations which we do have, we pay attention to only a small portion. While one is listening to a lecture, there are many stimuli playing upon him, to which he does not respond consciously. Some responses, of course, must be made, but the clock may be ticking, there may be various other noises in the room, or out on the street; there are various stimuli connected with the lights in the room, there is the pressure of one's clothes on the body, together with various muscle sensations due to remaining in a sitting posture for many minutes, and there are the movements of people about us. All of which may pass unnoticed if one is paying attention to what is being said.

Of the things to which we pay attention, again, only a very small portion remains as part of our conscious existence. We forget much, we ignore much; in fact, our thinking is possible only because we are partial to objects. Finally there is our guiding line in life, which is itself an instrument of choosing, determining that we shall be interested in some lines of behaviour rather than in others. Such a highly specialized consciousness as that of humanity is possible only at the cost of great 'slaughter' of possible experience. Our consciousness is like a spot-light that follows a moving character upon a stage, bringing him into full view, yet as it moves here and there with him, flashing upon other forms hidden in the shadow. These other forms do not cease to exist merely because they are not the star-performer. There are all sorts of potential selves, forgotten childhood experiences, wishes and fancies and impulses, which haunt us even in our most deliberately thoughtful moments. Many become the playmates of our idle hours. Some of them we can never bring to the light of knowledge. We feel their effects, but do not know what they are. They are like children playing pranks upon us, knocking at our door on Hallowe'en, and scampering away before we can open it and see them.

Often you are reminded of something, but find it impossible to tell what it is. It is as if you were trying to remember a name which you have forgotten. Though you know perfectly well that the name is not Smith or Jones, yet you cannot speak it. How is it that you cannot do this, and yet, when the name is recalled to you, you can recognize it? In other words, how can something which you do not know, enable you to know that another thing is not that something? Obviously, while you are not thinking of it, it still must have some influence upon you. So with many other things of which we do not think. There are many indications that the unorganized psychic material produces effects in our behaviour. It plays many little tricks on us. We shall see later that it is the cause of many of the errors we make. It conditions our temperament; it determines largely our likes and dislikes; causes all sorts of obsessions to haunt our minds; is the source of many forms of elation and depression, and inspires many of the fictions which constitute our reveries. Even our own very useful fictions about ourselves are to no small extent unconsciously determined.

Before Freud's day such facts were studied. Psychologists were interested in what they called the 'sub-conscious' or the 'co-conscious.' Facts of hypnotism and of multiple personality were known and discussed. The older psycho-therapeutics made much of the so-called 'sub-conscious,' as did also the cult known as New Thought. Much of the thinking about the sub-conscious was mystical and pseudo-scientific. Many people made a sort of pantheistic god of it. They seemed to believe that it was the same in all persons, and that most of the miseries of human life were due to the fact that we had somehow got out of tune with this 'Infinite.' In other words, people tried to make of the sub-conscious a secret backstairs, upon which they imagined they could sneak up into the presence of super-mundane reality.

In the chapter on Freud we saw that scientists now are beginning to take a less mystical view of this phenomenon.

We have already discussed certain phases of the unconscious and have seen how Freud and his followers are making it necessary for psychologists to abandon their old narrower intellectualism and to take a larger view of human nature. Freud's use of the term 'unconscious' has brought him much criticism. It is said that the unconscious is an unproved hypothesis and a gratuitous assumption, that it is mystical and self-contradictory. How, it is asked, can ideas, feelings and memories exist in the unconscious? Is it not necessary that these things be conscious in order to exist at all? It is not our purpose to enter upon a discussion of these criticisms. Perhaps Freud does not really mean that there are unconscious ideas and feelings. There has been a great deal of misunderstanding about this term.

Even if it could be shown that Freud considers the unconscious to be a thing, a separate department, I am not sure that it is necessary for us so to regard it. In his book, *The Interpretation of Dreams*, Freud does suggest, I think, a rather unfortunate diagram. The mind is pictured as if consciousness were a small porch or vestibule, opening into a sort of large hall, which is called the fore-conscious, behind which is a great dark building, composing most of the psyche. This Freud calls the unconscious. However, I suspect that such a view is really only intended to be a figure of speech.

Freud is certainly on more solid ground when he argues that the unconscious is merely an hypothesis, constructed in order to explain certain facts of behaviour, facts which, Freud contends, cannot be explained on any other theory. In his book, *General Introduction to Psycho-Analysis*, he says that certain patients behave in the same manner as a hypnotized person behaves, to whom an injunction has been given that five minutes after awakening he is to open an umbrella. When he obeys this order, what shall we say about his motive? He is acting upon an impulse of which he does not take cognizance. He is not aware that he has been told to

open the umbrella. Now a trauma, that is, a shock, or a fixation, may cause one to behave in the same way. A painful experience which causes a person to suffer intense conflict – for instance, an impulse or wish which he entertains but refuses to admit because, let us say, it is in conflict with his moral principles – may, together with the incidents originally associated with it, still produce effects in his behaviour, though he has entirely forgotten it.

One of Freud's early patients, a hysterical woman, came to him suffering from hysterical lameness. She had no idea what had caused her to have her symptoms. After a long and difficult analysis she recalled a number of incidents, among them the occasion on which she learned that her sister was dead. Her sister had been married to a man for whom this patient had a regard which she had never admitted to herself. When the news of her sister's death came, the thought flashed through this woman's mind, 'Now he is free and can marry me.' But this was a disloyal thought, and to the patient it was so horrible that, even when she recalled it in the process of analysis, she experienced violent emotion. However, we are told that her symptoms disappeared. I am not reporting this case because of any interest in psychoanalysis as a form of cure, but simply to illustrate the point, that here was a person who was enduring certain bodily states because of a preoccupation with or defence against something which she had entirely forgotten. What else should we say, but that the repressed wish was in this case an unconscious one? As Freud says, it is as if certain persons do not get through a painful situation, because they are unable to meet an overpowering emotional occasion. They are still preoccupied with the event, though unconsciously so. This fixation and preoccupation with an emotional situation may be either conscious or unconscious. The mourning after the death of a loved one is a *conscious* form of such preoccupation, or fixation. For a long period there may be a lack of interest in other things. The mind is caught

and held by the painful thought, and the behaviour of the person suffering grief is conditioned by that thought.

Now people may behave in much the same way even when their preoccupation is *not conscious*. There are persons who suffer depression quite as painful as that of a bereaved relative, who yet can give no intelligible account of the causes of such behaviour. Freud calls attention in his book, *Totem and Taboo*, to a neurotic form of grief. Often one who has nursed a relative through a long and exacting period of illness will, after the death of the sufferer, begin to accuse himself of neglect, feel that he has not done all that he could do. In such cases, Freud found that the real cause of such self-accusation is often the result of a wish, during the illness, that the patient might die. Such a wish, of course, cannot be entertained, being in conflict with the devotion to the sick person. It is, therefore, repressed and, though unconscious, still determines behaviour.

Rivers shows that the war neurosis, commonly known as 'shell-shock,' frequently grew out of unadmitted fear. He says that his 'shell-shocked' patients were commonly men who repressed their fear into the unconscious, and that men who admitted that they were afraid did not develop the war neurosis. Now in this use of the word unconscious, it is not meant that the patient is absolutely unconscious. Of course, he is conscious of his symptoms and his modified behaviour. What he is not conscious of is the *cause* of his symptoms.

§ 2

THE UNCONSCIOUS IN BEHAVIOURIST TERMS

Perhaps some of the difficulties regarding the unconscious may be solved, if we try to express the facts of the case in ordinary psychological language. In the chapter on Habit, I said a good deal about the conditioned reflex. Unconscious impulses may be regarded as habits or as conditioned re-

flexes. In an earlier chapter, it will be remembered, I gave as an illustration of the unconscious the example of the person going to a lecture by train. He does not need to think all the time he is travelling that he must get out at a certain station; he simply associates the name of the station with his impulse to leave the train, and then goes on thinking about something else. The associated impulse does not exist as an *idea* in his unconscious. It is simply a *delayed response to stimulus*. What he has done is merely to condition a reflex. He has conditioned the impulse to leave the train upon a *future* stimulus. Now there are many of our impulses which are conditioned upon future stimuli. They are delayed responses, because we cannot act upon them. When we repress an impulse – that is, put it into the unconscious – we withhold the response, which is thus delayed. It becomes conditioned, so that it will have a tendency to take place when stimuli are met which we do not consciously *recognize* as stimuli. The response itself may again become conditioned; that is, instead of our acting in a way in which we naturally would when we are stimulated, the impulse may be drained off into another reflex, which is a *substitute* for the original response. There is no reason why this process should be accompanied by consciousness.

It will be remembered that when we were discussing the conditioned reflex, we used Pawlov's experiment on the dog. When a hungry dog is shown meat and secretes saliva, we may call the sight of the meat stimulus I, and the secretion of the saliva, response I. Now, when, after ringing the bell each time the meat is shown him, the dog becomes so conditioned that he secretes saliva whenever he hears the bell without seeing the meat, we have merely put two reflexes together, as it were. We may speak of the sound of the bell as stimulus II and the response which the dog would naturally make to the bell as response II. The conditioned reflex means that in each of these reflexes, I and II, the stimulus and response are cut apart, so that response I is now connected with stimulus

II. What becomes of response II, or the tendency to make such a response? Surely there still must be some slight impulse to give response II, even when stimulus II is made to be associated with response I. This *tag-end* of the reflex arc is still there in the nervous organization. Of course, it is now cut away from the general system of organized behaviour patterns of the individual. There must be an enormous number of such tag-ends of conditioned reflexes in human beings.

These number II responses, we may say, do not ordinarily attain consciousness, because they are not connected in the general scheme of our life's organization. They may be *implicitly* active in all sorts of ways. They may be stimulated by all sorts of things which we do not notice. When they are, we have an unconscious impulse to act. This impulse is not at all the same as a stored-up idea or feeling. It is purely organic. Let us take a hypothetical case of a patient whose behaviour is pathological, because of certain unconscious motives. We make use of illustrations from abnormal psychology, not because we are interested in the morbid or because the unconscious is confined to psychopathic persons, but because such cases throw light upon behaviour of normal persons.

A man has been very faithful to his work, intensely interested in it, and is beginning to receive some recognition in his profession. One day he suddenly leaves his office. Two days later he returns, and cannot remember anything that has happened in the meantime. The morning of his return he found himself some way from the city in which he works. He is very much disturbed, and rightly believes that there must be something wrong with him, though he does not know what it is. This inability to remember is called by psychopathologists *amnesia*. His behaviour on the two or three days out of the office, seems to be cut off from the ordinary stream of conduct by 'memory gaps.' During the time the man has been away, we may say that he was suffering

from a very acute attack of *absent-mindedness*. Yet it is quite likely that casual observers who saw him during this period, would not think there was anything unusual about him. It is also likely that if he were hypnotized after his return, he would, in the hypnotic stage, be able to recall what he did during those two days. He consults a physician, who merely tells him that he has been very much worried about his work, that he has been working too hard, and that he must take a rest.

After a month's vacation, he feels much improved. Shortly after this he is promoted to a responsible position, but instead of feeling elated he becomes greatly disturbed. He acts queerly. He doubts his ability to meet the new responsibilities which have been placed upon him. He becomes so preoccupied with his work, that his wife feels that he is neglecting her. As he lives in a suburb near the city, he finds it necessary often to remain in town until very late, in order to give more time to his tasks. Later, he rents a cheap room in the city, and it is some time before his wife is able to locate him. Finally, he is induced by his family and others to consult a psycho-analyst. Analysis reveals that his original leaving of his work was merely a substitute action for his later behaviour in leaving home. His worry and over-anxiety about his profession is really a substitute for another form of anxiety which is unconscious.

Consciously he believes that he loves his wife; but he is extremely restless, and analysis reveals the fact that he is not able, and never has been able, really to give his love to any woman, because he thinks of every woman as if she were his mother. Therefore his wife, who now appears to him in the rôle of both wife and mother, brings up in his unconscious a painful conflict that began in his childhood, of the nature of which he is not aware. It may be shown that he was throughout his boyhood resentful, aloof, and shrinking even from his mother. This conflict, we have seen in an earlier chapter, is known as the *Œdipus Complex*, and it would appear

to be the only adequate explanation of this man's behaviour.

Now let us note that the violent taboo which this man felt in regard to persons of the opposite sex, is really a conditioned reflex. For the normal response there has been substituted a strong negative response. This negative response, the conflict and the sense of emotional failure, is itself conditioned, so that it appears in overt behaviour, or consciousness, as a fear of failure in his work, or anxiety concerning his professional career. His running away from his work, as we have said, is really the symbolic expression of his wish to run away from home, a wish for which he gave no reason and which he cannot consciously recognize. This wish is what I meant by the term delayed response to stimulus. It is a response which becomes associated, therefore, or conditioned, with many future stimuli which are unrecognized, so that there may have been years during which unrecognized stimuli were perpetually functioning to excite this delayed form of response into activity. The restlessness which the man felt resulted from his impulse to act in ways that he did not understand. Yet there was no way in which he could make himself conscious of all this, because the reflexes which constitute the delayed response were not organized in the man's habitual behaviour-patterns. This case illustrates what we mean by the unconscious.

§ 3

THE INFLUENCE OF THE UNCONSCIOUS ON BEHAVIOUR

I have given this illustration in the attempt to state the facts of the Freudian conception of the unconscious, in such terms as will not make it necessary for us to assume that wishes and thoughts are somehow *stored up* in a mysterious receptacle known as the unconscious. I am sure that much of the disinclination among psychologists to accept Freud, comes from

the fact that his terminology involves the apparent paradox of unconscious ideas, memories and wishes.

Let us now note the influence of the unconscious upon the behaviour of normal persons. Many illustrations of this fact may be seen in Freud's book, *The Psychology of Everyday Life*, and in Brill's *Fundamental Conceptions of Psycho-Analysis*. All persons normally must achieve a very great amount of repression in order that their mental life may be co-ordinated at all. All learning or conditioning of reflex is, in fact, a form of repression. The discipline which the young child must endure in order to become a social being has as its end effective repression of this sort. Most adults have forgotten what it is to be a child. They have forgotten not only the things which they have repressed, but also much of the process of repression itself. This process is really painful. It makes the children cry. How many times has the child to be told 'no,' and with what resistance must it develop habits of obedience and of adjustment to other persons! Bodily habits must be trained; social habits, achieved. In all of which, punishment, restraint and self-surrender are commonplaces. Where repression is finally successful, the individual is normal, but there are many factors which make for failure. Wrong educational methods, over-indulgence, or too great strictness on the part of the parents, or precocious disillusion on the part of the child regarding any one of a thousand things, may result in *trauma* and *fixation* which ever afterward cripple the individual in certain respects. Perhaps there is no one, even among normal people, who has not suffered to some degree at least in these ways. Now such training, together with psychological accidents that may go with it, means that many forms of response to stimulus are delayed and conditioned. But some traces of the original reflexes remain and operate in the ways that I have tried to set forth. McDougall says that the instincts set the ends and furnish the driving force for all human activity, from the most trivial and primitive, up to

the highest and most complex. It would be more correct to say, that it is not instincts as such which so dominate us, but certain 'complexes,' that is, we are all greatly influenced by our repressed impulses together with their unrecognized stimuli.

Note what we mean by temperament. Our 'temperament' consists of many kinds of attractions and repulsions, of elation or depression, of queer whimsicalities, hobbies, hopes, of which we cannot give a logical account. These things emanate from the unconscious: they *are* the unconscious. Psycho-analysts, together with William James, have pointed out the fact that even the greatest and most deliberate philosophers are influenced by their temperament to such an extent that their thinking is never pure logic, but is always modified by factors which are *extra-rational.* Thus a Plato is seeking, with all his independent pursuit of knowledge, to construct a logical system of ideas which will serve him as a refuge from a world where time is everlastingly creating unexpected realities, and is forever sweeping all things away. The thinking of a Locke or a Hume, hard-headed as it is, is motivated in no small degree by a resistance to medievalism which comes largely from unconscious impulses.

Freud and Brill and other psycho-analysts have frequently pointed out the fact that such trivial mental phenomena as errors, slips of the tongue, and the like, are determined by unconscious impulses. Brill gives a number of rather amusing illustrations of this fact. The following are typical: at an evening gathering the hostess has served her guests refreshments which are anything but adequate. The company is discussing Theodore Roosevelt; one of the guests wishes to remark, that, at any rate, Roosevelt gives people a 'square deal.' What she actually says is that Roosevelt gives people a '*square meal.*' There is general laughter because the unconscious intent is here easily recognized. Again: one of Brill's patients is very much given to the use of powder and rouge.

The physician advises her to perform a difficult task and to return and report to him afterwards. When she returns for consultation, the doctor intends to put the question: 'How did you make out?'; to his embarrassment, however, he says: 'How did you *make up*?' During the war, a statesman who was deeply grieved over the enormous human slaughter, in an oration referred to international morality. What he said, however, was international *mortality*. If you watch yourself and other persons in such commonplace errors, or acts of forgetting, you will often find illustrations of this sort. When we lose things, there is commonly an unconscious reason. One frequently leaves an umbrella at the home of a friend where he has enjoyed a happy evening and where he wishes to return. An interesting error in printing came to my notice recently. A reactionary paper, describing an uproar created by members of the Labour Party in the House of Commons in England, referred to the event as the climax of socialist agitation. The word appeared in print as '*slimax*.' A typographical error of this nature may pass unnoticed through a half-dozen hands, author, typist, proof-reader, printing room, if it so happens that all these men have the same dislike of the proletariat.

Recently a psychologist published an analysis of the errors made by a typist in copying a manuscript. The errors were very revealing. Other actions such as collecting and hoarding, hobbies, and so forth, are known to be motivated by unconscious impulses, and to be primarily symbolic actions or substitute responses for repressed desires. There are psychopathic habits, such as excessive drinking or pathological smoking, cases where the person who has such a habit loathes himself, and would give anything if he could free himself, and yet is unable to do so. In all such cases the behaviour is *compulsive*, that is, it is determined by the unconscious.

Brill says that in choosing a career one is very likely to be motivated by unconscious tendencies. He says this is also

often the case in choosing a mate. It is a very common fact that men marry wives who resemble their mothers. This is illustrated by a song which was sung by soldiers during the war: 'I want a little girl just like the little girl who married Pa.' This fact of the unconscious is known as a '*mother fixation*.' Another form of this fixation is seen in the common habit of men who have lived loose lives, of singing songs about their mothers, and of being unduly sentimental about their memories of her.

From this purely personal manifestation of unconsciously motivated behaviour, we should move on to a consideration of the rôle which the unconscious plays in *social behaviour*. We shall have many occasions to note this fact, when later in the book we consider some of the problems of social psychology. Many forms of religious belief, many social movements, much of patriotism, many of the determinants of both socialism and conservatism, many of the causes of war and social strife, are seen to be results of factors in the unconscious.

Some of these factors we should point out a little more specifically. Of course, there are many forms of unconsciously stimulated fear. These are called *phobias*. The traditional fear of mice, snakes, and certain insects belongs to this class, as does the spinster's morbid fear of burglars, and also often the sudden fear of dogs which a little child may develop. Brill says that in many cases the fear of dogs is really the boy's fear of his father. The same is doubtless true of the fear of the devil which was fashionable in the middle ages. On the social plane, phobias may have very serious results. Many of the cruellest actions of crowds, such as the persecutions that have taken place in the name of religion, wars and so on, can really be traced back to phobias of one sort or another. The unfortunate habit of the mass of persecuting its prophets, and even in our own day resisting the discoverers of new truths, is due to the phobia concerning the new.

Another form of unconsciously motivated activity is known as *compulsion*. There are certain neurotics who suffer from this symptom, find themselves constantly making certain grimaces or gestures, or performing certain ceremonial acts like perpetual hand-washing, writing alibis for themselves, and so forth. The ceremonialism of such neurotics is symbolic of something repressed. It is really a form of conditioning of certain reflexes, so that the ceremonial act is a *substitute* for the inhibited one. Persons suffering from this ceremonialism perform certain routine actions as *ends in themselves*, and are perfectly miserable unless they do so. Certain forms of social behaviour are forms of ceremonialism, such as saluting the flag. Much religious practice should be classified under this head, and also a very large part of our conventional morality. Behaviour of this sort is not adjustment to situations.

Another way in which the unconscious may dominate behaviour, we should call *compensation* or over-compensation. Where there is any feeling of psychic loss or inferiority, the unconscious will fabricate something which has the function of making up for this loss. Thus the protest against the feeling of inferiority may determine one to put on a bold front, to swagger and assume the rôle of a very pompous and conceited individual. Likewise, persons whose interests are unconsciously fixed on sexual practices which are unacceptable to consciousness, or upon the obscene, frequently become puritanical and prudish, giving the appearance of great innocence. Such persons show a morbid tendency to being shocked. They frequently become moral reformers, are very much concerned about their neighbours' morals, and demand a censorship of books, films, the stage and the like. Compensation of this kind is really a *negative expression* of a morbid infantile fixation.

Substitution is another form of behaviour which the unconscious may assume. It frequently occurs in social behaviour. If a man is insulted by one to whom he cannot talk back, he

may kick the cat or swear at his typist. That is to say, when one finds it impossible to express an impulse in one situation, he may express it in another. The mob in Omaha which was bent on lynching certain negroes, when the authorities rescued its intended victims, attacked the mayor. An interesting illustration of substitution occurred in New York City a few years ago. The mayor at that time, John P. Mitchell, was a candidate for re-election. Mr. Mitchell had done two things which deeply offended some of the voters. First, he had brought upon himself the bitter opposition of certain religious groups, because of the way in which he had permitted their organized charity to be held up to public criticism. Second, America was rapidly drifting toward participation in the great war, and Mr. Mitchell had strongly identified himself with the pro-war factions, thus arousing the hostility of many pacifists and persons with pro-German sympathies. Now neither of these forms of hostility could at that time be openly expressed, and the opponents of the administration had to devise substitutes, some political propaganda, some *issue* which they could openly express. The so-called 'Gary Schools' were seized upon as the issue of the campaign. Really the 'Gary Schools' were an unimportant fact, but they soon became the symbol by which the real opposition to the mayor could be expressed. For the Gary school was in the first place a departure from the usual educational methods, and could easily become an issue which was substituted for the issue about the charitable institutions. Secondly, the Gary Schools bore the name of the town of Gary, Indiana, where this method was first applied. But Gary has, as its most prominent industry, the steel trust after whose president the town was named. Hence, the Gary school was a 'steel trust school,' and steel meant munition makers, and munition makers meant the pro-war party. In opposing the Gary school, men could therefore register their opposition to America entering the war at a time when feeling ran so high that in no other way could such opposition be so

publicly participated in. Hundreds of thousands of people suddenly became excited about the Gary schools, indignant to a degree far beyond anything which this innocent educational experiment might otherwise have aroused. Here the Gary school issue was a substitute for a form of indignation which very many persons felt, but did not admit even to themselves.

There is another manifestation of the unconscious, which deserves a word. I refer to the phenomenon of *projection*. By projection psychologists mean the habit which people have, of escaping responsibilities for their own deeds or wishes by attributing them to somebody else. This is a very common practice, and occurs among persons both normal and abnormal. Two political parties in a contest will each accuse the other of certain intentions, such as the wish to bribe and exploit. The chances are that both are right, only that each is attributing to the other its own unconscious wishes. The same is true of nations at war. A lunatic who has murderous intentions toward some one does not admit to himself that he hates his intended victim. He always says to himself, 'He hates me,' or, 'He is conspiring against me' or 'is exerting evil influences against me.' A common social form of projection is the love of scandal. People who indulge in scandal are commonly talking about things which they want to do themselves.

An interesting path which the unconscious may take, is known as *regression*, or the return to an earlier state of emotional development. Many forms of nervous diseases are due to such regression, but there is a slight tendency toward it in every one. In a previous chapter I have discussed this phenomenon. A sociological instance of it may be found in the father and mother symbols current in religious mythology. Dr. Otto Rank in his psychological discussion of myths, particularly legends concerning the birth of *the hero*, calls attention to this fact of regression. There are many myths in which the hero is abandoned by his noble parents, exposed,

and brought up by humble foster-parents, only later to have his really high birth disclosed, and to be restored to the exalted station to which he was born. Such myths commonly contain a re-birth symbol, such as drawing out of the water, or the existence of more than one mother-image in the story. Rank says that, psychologically interpreted, these hero-myths show a type of reasoning which is most highly developed in the lunatic, who frequently imagines that his parents are not his real parents and that he himself is a person of nobler lineage. This is a form of protest against the feeling of inferiority. But it is also an infantile type of thinking. For it is said to occur as a common experience in many children, when they first find themselves suffering from a feeling of aloofness, because they have discovered that they are no longer the object of the entire affection of their parents, who are bound together by a mysterious attraction which excludes the child. The child, disillusioned about his parents, often goes back in fancy to the earlier images, which suggest the time when he had no conflict about his parents, but idealized them instead. This infantile type of thinking is so common that it characterizes the mythology of most peoples.

Finally, the unconscious may be made to take the form that psychopathologists characterize as *sublimation*. In sublimation the repressed response or impulse becomes so conditioned that it is attached to forms of thought and behaviour which are socially acceptable. Probably the most universal type of sublimation is art, in which erotic tendencies are symbolized in such ways as not only to adorn and beautify our world, but to transform the sex impulse itself, so that it is characterized by such values as loyalty, romantic affection and devotion to high ideals.

§ 4

Must we be forever the helpless victims of our unconscious? In one sense, yes. We may lift many of our impulses into consciousness, but the great bulk of them will remain conditioned in the ways I have described. Perhaps this is desirable except in cases where the forms of action to which the unconscious impels us, result in a lack of adjustment to the environment. Without the unconscious, our mental life would be much narrower, in some ways, and perhaps we should become literal-minded and pedantic. Certainly we should lose much in the way of wit and fancy, whimsicality, spontaneity and artistic creativeness. Much that men call inspiration is really a phenomenon of the unconscious.

Yet this unconscious must be controlled as much as possible. It is discouraging to us to realize how even with the best effort we are still in the grip of elements in our nature which are irrational, and often anti-social. So far as possible, these elements should be brought to the light, so that they may be consciously and deliberately grappled with. It is important that in the emotional situations of our lives, we should not seek to evade the facts, or run away from our problems, as most neurotics seem to do. So far as possible, thinking should be made objective, for it is objective thinking which has given us our scientific advance, and in a world organized as ours is, we can adjust ourselves to the conditions of such advance only by habits similar to those which have created it. Fortunately to-day certain portions of humanity seem to be moving in the direction of greater and more wholesome candour. Many of the repressions which survive from older ages, and are kept going by unadjusted persons, are being replaced by new and more adequate forms of conscious control. The intelligent world to-day is outgrowing many taboos. Coercion and obscurantism are fighting hard to check this tendency to more wholesome living. But it is

possible that the new age of reason, the day of more courageous self-criticism, better self-knowledge, open-mindedness and honesty generally is approaching. This is the hope of the social psychologist.

CHAPTER TWELVE

THE SIGNIFICANCE OF INTELLIGENCE TESTS

§ 1

Most people have now some knowledge of the so-called intelligence tests. The attempt to test out the intellectual capacity of people, to note their differences, properly belongs to the realm of applied psychology, though it has great theoretical importance, particularly in sociology. The tests are now used in many schools and colleges, and thousands of students have submitted to such an examination. In psychiatry, the tests are used to detect feeble-mindedness.

The aim of intelligence-testing is to indicate roughly an individual's ability to learn, or to adapt himself to new situations. In our modern life, with its great complexity, and its tremendous demands upon the intellect, it is not surprising that we should seek to estimate men in respect to their intelligence. For it is through intelligence to-day – and in the future it will be increasingly so – that people must adapt themselves to the world in which they live. In a sense this application of psychology is really only a more careful and accurate way of doing what has hitherto been done simply by the practice of common sense.

§ 2

COMMON SENSE AND MENTAL TESTING

It has always been found necessary to 'size' people up, to form some judgment concerning their character and general level of work, their ability and their reliability. Employers, and parents, and educators have always done this, and in many cases it has been done with a fair measure of shrewdness and accuracy. But on the whole it has been shown that the ordinary ways of estimating people are erroneous. Prejudice and irrelevant matters often lead to wrong conclusions. What common sense has lacked has been an accurate, objec-

tive and wholly impartial basis for judging. The application of psychology to this problem is still in the experimental stage in spite of the enormous number of tests that have been given. It is too early to say that any test has been devised which is final, although there is a high degree of correspondence in results among the best of these tests. There can certainly be no a priori reason why psychologists should not be permitted to try to do well what common sense has all along had to do in a bungling way.

Yet there has been a good deal of opposition to such an attempt. It seems to many people an undemocratic practice, and the results of such a practice are resisted because they seem to be out of harmony with the dogma of equality. Much of our political philosophy is derived from early nineteenth-century Humanitarianism, and carries over the idealization of the mass, which was characteristic of that point of view. Thus it is still believed by many that all men possess an 'identical principle of humanity,' and that if there are any differences in men in respect to wisdom or goodness, they are due to the fact that unfortunately the environment prevents certain persons from expressing this humanity which is in them. It is not because of any inherited differences in capacity to learn, that one man is a genius and another a dullard. A dullard, too, would be a genius if he had had an opportunity. In other words, the differences among men are held to be external and accidental, and not inborn. Somehow the crowd always resents the suggestion that there is any native distinction of worth among people. It carries the notion that one man is as good as another to the point of denying that there are hereditary factors of superiority and inferiority.

It is precisely this alleged hereditary difference that the intelligence tests are devised to discover and emphasize. The tests are not intended to examine into one's information, or the amount of one's learning. Every effort has been made to exclude from them any differences which are the result of

external conditions. Of course, people do not have the same advantages, and these better or worse opportunities show in our thought and behaviour. Nevertheless, the problem remains. Given the same advantages, will two persons, because of hereditary differences, react differently? The intelligence tests would seem to indicate that there are inherited differences in ability to learn, and that while, by conditioning people's reflexes, the environment may equip us with different patterns of behaviour, yet people differ by nature in the ease with which such patterns are acquired, and in the use they make of them. Strict environmentalism, the belief that environment rather than heredity determines human destiny, does not seem to allow for the fact that some people do on occasion meet new situations in new ways. If a man is wholly the product of his environment, it is difficult to see how he, in any situation, becomes the master of it. Products do not, as a rule, turn around and condition their producers. What the intelligence tests, therefore, seek to find out is this ability to meet new situations. In other words, intelligence tests are simply concerned with 'gumption' or 'mother-wit.'

§ 3

BINET

The problem of testing this inherited mental capacity is very new. Alfred Binet began the study of school children in the latter part of the nineteenth century, and in 1905 published the results of his work. Binet sought to devise problems which the average child of a certain age could solve. After many efforts and after examining a large number of children, he set forth a certain number of such problems, which corresponded to the mental capacity normal to a given period of mental growth. If Binet had published as the standard of mental life the problems which 50 per cent. of the

children of any age could solve, he probably could have hit the mathematical average. But dealing with a human problem he was, correctly, more lenient than this, and the test-problems he established finally for each year of childhood were those which he found in actual experience that 75 per cent. of all the children tested could solve. School work was left out when tests were given. The Binet test dealt with the child's ability to think, to pay attention, to remember, and to learn. Notice that the tests are testing *ability*, and not things learned. The tests are given to a child, and the highest test in the series, which he can successfully pass, is said to be his 'mental age.' Then his mental age is divided by his real age, and the result multiplied by 100 is called his intelligence quotient, or 'I.Q.' Thus if the child has a mental age of 8 and an actual age of 6, his I.Q. will be 133·3. If he has a mental age of 6 and an actual age of 8, his I.Q. is 75. If his I.Q. is much lower than this, he is said to be mentally defective. Adults with I.Q. of 70 or 75 are called morons, and their mental age is somewhere between 12 and 14 years. Adults with a mental age between 8 and 10 are imbeciles, and those with a mental age below 8 are idiots.

The Binet tests have been somewhat revised by a number of psychologists in other countries. Probably the best known American adaptation of them is the Binet-Stamford test by Dr. Lewis M. Terman. According to this test, it is generally held that a normal adult should have a mental age of at least 16. The practice of giving such tests to school children has met with some criticism. It is held that too much is made of language processes, that a child may be very intelligent and still may so misunderstand what is required of him that it does not indicate his real ability to solve problems. Dr. S. C. Kohs of the University of Oregon notes this difficulty, and has devised a test which consists of manual work. A number of cubes, the six sides of which are painted in different colours, must be arranged so as to copy various mosaic designs. The length of time required for this work, and the

number of manipulations required for completing each pattern, are noted, and a standard is set for each age. This test can be given, therefore, both to adults and to children. I believe that on the whole the results of such tests agree with those of the Binet method, though they probably give a higher degree of accuracy than the latter.

It is often said that no standard can be raised which will correspond to the level of the work of 75 per cent. of the children tested, and that, in order to determine a child's mentality, tests should be given at various periods of his development. I believe this practice is usually followed. In most cases it is found that when a child has a low I.Q. in one period, he will have a low I.Q. in the others. The same is true of those who have a high intelligence quotient. That there is a regular normal process of mental development can hardly be denied. This may be noted if you watch the *drawing* of children of various ages. Give a little child a pencil and he will merely scribble; later, he will make a very crude figure, but there is no symmetry or balance. He may put both eyes in the same side of a human head. He does not attach the arms and legs to the human figure with any sense of their true relationships. It is only gradually that the child notices these relationships and is able to synthesize. At first the child thinks very much as animals probably think, by associating concrete unities. Later he begins to use abstract ideas, and finally he reacts to absent stimuli as well as to present ones.

If this is the usual order of mental development, it ought to be possible to work out tests which would show whether or not a child is developing normally, even though they did not disclose an absolute correspondence with the average level of attainment of any given year. The fact that the mental age of children may be above or below their true age is, therefore, indicative of precocity or of backwardness – if not of *absolute* intelligence.

Again, it is said that it is impossible to isolate intelligence;

that when we try to do so, we are merely talking about an abstraction. How, one asks, can the solving of these little arbitrary puzzles of which the test consists indicate anything of one's ability to think? It might indicate accuracy, but accuracy is not always the same as sagacity. A student, for instance, may be very inaccurate in arithmetic or algebra and quite superior in geometry. I think this is a fair criticism, but in fairness to the psychologists, it should be said that they are not trying to test intelligence as if it were an abstract thing or a given 'faculty.' As Kohs says, the attempt is made first to test one's ability to pay attention; to seize upon the relevant and significant factor in a situation; to analyse and discriminate differences, and finally to compare things, to discover new similarities, and to make syntheses. If you will recall what I said in the chapter on 'How We Think,' you will note that I analysed thinking into these same three kinds of ability. You will remember that James says the ability to seize the relevant factor, to discriminate differences, and to make new and fruitful comparisons, is something that cannot be taught. In the chapter on Habit, I referred to this ability as 'super-habit,' and carefully pointed out the fact that such super-habits must be acquired by the individual himself. They cannot be conditioned in him from without. Thus it would seem that differences in mental rating may, on the whole, indicate different levels of native intelligence, if we understand by native intelligence, not a thing given, but ability to perform work.

Once we begin to think of people in terms of their I.Q., a number of social problems of a psychological nature are at once suggested. Attempts have been made to learn if there is in the intelligence tests any confirmation of the eugenic doctrine that only congenital variations are inherited. Such tests as have been given would seem to indicate that this is the case. On the whole, the children of scholars and learned men show a higher intelligence quotient than those of the less educated. This might appear to lend support to the idea that

effects of education are themselves inheritable. But it may be argued, on the other hand, that the ability to acquire an education is itself an indication of a relatively high order of native intelligence. Most biologists hold that this is true, and that mental ability is transmissible in the germ-plasm. Some eugenists are very much alarmed because they fear that the family strains bearing these determinants of high mentality are being bred out of the race. As to this problem, it is too early to come to any final conclusion. Many more tests must be made.

The question has also been raised whether there is any correspondence between the position of a family on the social ladder and its native intelligence. Various tables of statistics have been published in order to prove that there is. But the number of persons tested in this respect is too small to enable us to generalize so far as to say that the basis of social distinction in our present competitive society is to any great extent the result of selection of the higher forms of mind for social and economic success. In other words, few people will deny the fact that social position in most civilized countries depends very largely on the merely accidental possession of money, and that the wrong kind of people may get rich. Many more tests must be given before it can be said that there is any close correspondence between mentality and our present class distinction.

Another question has been raised. Is there any correspondence between differences of intelligence, and differences of race and nationality? Tables of statistics have been published which would indicate the mental superiority of Americans of British descent over immigrants from southern Europe, and also over negroes. These tables, however flattering they are to many of us, are not wholly conclusive. Many of the immigrants from southern Europe are themselves members of a rather low peasant class, who cannot be taken as representative of the nations or races to which they belong. The fact that Italian railroad labourers might have a low mental rating

does not indicate that Italians as a whole are mentally inferior to the English or Scotch. Moreover, it is interesting to note that the negroes in the north show a higher mental rating than those in the south, and this would make it appear as if, in spite of efforts to the contrary, the mental tests had not yet succeeded in eliminating all environmental factors. The best we can say is that perhaps some day, when the tests are more perfected, and those who give them are better trained, more light may be thrown on such problems. At present, however, the wisest course would seem to be to wait for the accumulation of a larger body of facts before any generalizations are attempted. It would have been well if psychologists had had ten years more in which to study and make experiments with these tests, before they were called upon to use them in any situation of great theoretical or practical social importance. Perhaps if this had been the case, the army mental tests would have been less subjected to criticism. For the whole matter of testing was a little premature.

§ 4

THE ARMY TESTS

In the winter of 1917–18, when the Government of the United States was training troops for overseas service in the war, a group of the ablest psychologists in the country was requested to prepare a set of mental tests which would enable the authorities to train men more rapidly and to select for special tasks those who gave evidence of exceptional ability. As Professor Yerkes says, 'the original purposes of the committee in the preparation of methods for intelligence testing were less important than the uses actually made of the results.' It was the intention to prepare an examination that would indicate the drafted men who were of too low a grade mentally to make satisfactory privates in the army. 'It was desired also to indicate, if possible, those who were mentally

unstable or who might prove incorrigible so far as army discipline was concerned. In addition the committee hoped to be able to pick out exceptional types of men, who could be used for special tasks that demanded a high degree of intelligence.'

As Yerkes also says, it was unfortunate from the scientific point of view, that many lines of investigation could not be carried out. The immediate pressing practical need was too great. But it is not claimed by the committee of psychologists that the tests give a wholly correct picture of the levels of intelligence in America. Those who use the tests for strictly theoretical ends should do so with some caution, since the purpose of the tests was limited to the practical consideration of rapidly training an army for military service. However, the results of the tests are very important indeed. For never before have psychologists had an opportunity of studying under any controlled conditions so large a body of men.

The test was given to something over 1,700,000 persons, who were drawn from all walks of life and who altogether may be taken as a fair cross-section of the population. The test-problems were very carefully worked out, and while they often seem trivial to the lay mind, they are, like the Binet test, devised to discover, not the degree of an individual's training or experience or information, but rather his ability to think quickly and accurately. Two tests were devised: one, called the *Alpha* test, which was given to men who could read and write English; and the other, called the *Beta* test, which was given to men who were illiterate or unacquainted with our language. This latter test consisted of such things as piecing together the several parts of pictures which had been cut up in various ways; tracing through a maze, and other simple puzzles.

Let me give a few examples of the Alpha tests. I have heard a number of educated men say they were quite sure they could not pass these tests. Others have said that they were so simple as to be quite ridiculous. It is difficult to give a

correct idea of the various tests which were used, in the brief space of this chapter. Test I, for instance, called 'Form 5,' consists in marking diagrams. One of the problems is as follows: 5 circles stand in a row. The test person is required to make a cross in the first circle and figure I in the last circle. Time allotted is 5 seconds. Another problem consists of three circles in a row, also the words 'yes' and 'no' printed on the same line, and the requirement is as follows: 'If a captain is superior to a corporal, put a cross in the second circle. If not, draw a line under the word "no." The time allowed is 10 seconds. Some of the problems in this test are more complicated, but they are all of this nature.

Test II consists of 20 simple arithmetical problems, such as: 'If you save $7 a month for 4 months, how much will you save?' 'If a man runs a hundred yards in 10 seconds, how many feet will he run in $\frac{1}{5}$ of a second?' The time allotted for the entire test is 5 minutes.

Test III is designed to test practical judgments. Here are two typical problems:

'Cats are useful because –
They catch mice;
They are gentle;
They are afraid of dogs.'

The person tested is required to check the correct answer. Another typical problem in the test is as follows:

'Why is it colder near the equator?
The poles are always farther from the sun;
The sunshine falls obliquely at the poles;
There is more ice.'

Time allowed is $1\frac{1}{2}$ minutes for 16 such problems.

Test IV was designed to determine a person's ability to compare and discriminate. There are 40 groups of words,

two words in a group. Some of the words are synonyms and some are opposites, as for instance:

wet,	dry
in,	out
class,	group
effeminate,	virile
confess,	admit

The person tested must indicate whether these pairs of words are synonyms or opposites. Three minutes are allowed for the test.

Test V consists of short sentences in which the words are placed in confused order. The person tested is required to straighten out the sentence in his own mind, and then indicate whether the statement is true or false. The following are typical:

'Lions strong are.'
'Not eat gun powder to good is.'

Time allowed is two minutes for the 24 sentences.

Test VI consists in completing a series of numbers, as for instance:

1 2 4 8 16 32

The tested person is required to add two more numericals which would logically follow in the sequence. There are 20 problems; time allowed is three minutes.

Test VII is designed to test one's ability to note analogies. Here is a typical problem:

gun – shoots; knife – run cuts hat bird . . .

The person tested is required to note how the first two words are related, and then to underscore the word which is related in the same way to the third word. The correct

answer in this case would be to underscore the word 'cuts.' There are 40 such problems and the time allowed is three minutes.

Test VIII is designed to test simple common-sense information. I am not sure that it is quite in line with the other tests because of this very fact. Here are some of the problems: 'The pitcher has an important place in tennis, football, baseball, handball.' 'Arson is a term used in medicine, law, theology, pedagogy.' The person tested is required to underscore the word which will make a correct statement. Four minutes is allowed for 40 such questions.

These tests were varied somewhat so that it would be impossible for those who had taken them to coach others who were to be tested later. On the whole they do not seem to be difficult problems, though I believe that the shortness of the time allotted is open to some criticism. Professor Yerkes says that varying the time did not materially change the results. Personally I am sure that it would change my results. I cannot think at all when I know that I am being hurried. I shall have more to say on this point a little later in the chapter.

Let us note on what basis the rating was done. There are 212 possible points which may be made in these eight tests. Those who scored correctly a minimum of 135 were marked A; those who scored correctly 105 were marked B; 75, C+; 45, C; 25, C−; 15 D; none D−. The A grade is said to correspond to a mental age of 18 and over; B, 16 and over; C+, 15; C, 13–14; C−, 12; D, 11; D−, 10 and below. Those who made the grade A are said to be very superior. B represents the type of mind which can graduate successfully from college, and can grapple effectively with the problems of life requiring insight and self-command. C+ represents the type, let us say, of the ordinary high school graduate. C, just the general average, and the other grades below average. Of the whole white draft, the percentage of men making the various grades is as follows:

A	–	4·1
B	–	8
C+	–	15·2
C	–	25
C–	–	23·8
D	–	17
D–	–	7·1
		100·2

The total of these percentages is ·2 per cent. more than 100. I do not know whether this is an error on the part of Yerkes and his co-workers, or whether it is due to the fact that a few others than the draft were added. I know that the rating of officers is included in this result.

§ 5

INFERENCES FROM THE ARMY TESTS

The striking fact is that the results of the army tests apparently show that 49 per cent. of the people in the United States have a mental age of about 13, while only 4 per cent. give evidence of superior ability, and only 12 per cent. could be expected to behave with any originality of adjustment in a critical situation. Some extremely pessimistic inferences have been drawn from these figures. Mr. Lothrop Stoddard, Prof. Wm. McDougall, Mr. Albert Wiggam, and others, see in the results of the army tests a very gloomy outlook for modern civilization. I cannot enter into any detailed discussion of these writers. The case they make is somewhat as follows: Industrial civilization is new. It is becoming rapidly more and more complex. It may already have developed to the point where it demands more intelligent activity on the part of the average man than he is able to put forth. This is not all. It is said that mental ability is an inherited factor; that it

is carried in the germ-plasm. According to these writers 50 per cent. of the children born in each generation are the children of persons whose mentality is so low that they would be classed by the army intelligence rating as belonging to the last 25 per cent. Again, if we should draw a line separating those who are of average intelligence and over, from those who are below the average, it is said that the lower half produces 80 per cent. of the children born in this generation. The higher the intelligence rating, the fewer the children. Families with a rating of A and B are not reproducing their numbers. From this fact it is argued that intelligence is being bred out of the race, at the very time when civilization needs it most.

Evidence brought forward in support of this fact has been compiled by Mr. Alleyne Ireland. He says that before 1800 11 per cent. of the men who ranked as geniuses in England were the sons of artisans; that in the first quarter of the nineteenth century this percentage had dropped to 7 per cent., and that to-day it is only 4 per cent., and this, notwithstanding the fact that the working class in England has been steadily gaining political, educational and economic opportunities, and notwithstanding the fact that through the same period of time the working class has practically doubled in numbers. His figures may be incorrect, and there may be many environmental factors involved, so that one should not draw too hasty conclusions.

I think the conclusions of all these writers are premature for reasons which I stated earlier in this chapter. However, such inferences have created quite a storm among liberals, and others who, in their defence of our democratic dogma, have gone farther than merely to question the reasoning of such writers as McDougall and Stoddard, and have in some cases shown what seems to me an unnecessary hostility to intelligence-testing itself.

It is argued by some that the results of the army tests have only 75 per cent. correspondence with those of the Binet test;

that no definition of intelligence has been agreed upon by the testers; that if, according to the Binet standards, the average mental age of adults is 16, the army tests showing it to be 13 would imply that the average is below the average, which is absurd. Again, it is said that none of the tests really test intelligence; that the problems are foolish, trivial little stunts; that no one can estimate the mental ability of an individual in an hour. And it is feared that the tests may become 'engines of cruelty.' For the wicked psychologists may some day presume to test everybody, and then in arbitrary and tyrannical fashion assign each one to a superior or inferior position in life.

As to this last argument, I do not think there is any very great danger that the philosophers will ever become kings in our democracy. The most serious criticism of the tests is that of Dr. S. C. Kohs. He says that *previous experience* is a factor not sufficiently taken into account by those who conducted the tests. In other words, a man who is a mental worker by profession would be more at home in taking the test than one who, though having the same natural intellectual capacity, is not used to such things. The latter, therefore, not only must compete with the former, but also must adapt himself to a new situation, so that he is at a disadvantage. Again, there are the *difficulties of testing men in groups*. All sorts of irrelevant factors may enter. For instance, men tested in a group may take the test less seriously than they would if tested individually, and there may be developed the *crowd spirit*, in which resistance to being tested would take the form of a deliberate lowering of the type of response. Many ex-soldiers have told me that this sort of thing frequently happened. However, Yerkes and Yoakum say that there are no great differences in the general results when the tests were given singly.

An important point is made of the fact that these tests were often given under *physical conditions which were highly disadvantageous*. We learn that they were sometimes given after

long and severe drill or marches, when the soldiers were exhausted and oftentimes the surroundings were anything but comfortable. In answer to this, it may be said that the physical conditions, however bad, were the same for all members of a given military unit, and this did not prevent the individuals from making different grades in their answers to the test-problems.

I have already spoken about the *speed* required. Although Yerkes says that the results were not greatly different when the time was lengthened, I am sure no one would say that speed is necessarily correlated with intelligence. Many times a person's reaction is delayed because of emotional factors. We saw this when we discussed the Jung association tests. For these and other reasons Kohs argues that the average mental age, 13, is too low; that there is no reason why the results of the army tests should cause us to abandon the standard for adult mentality, set by the Binet tests as 16 years. However, Kohs does not argue that this raising of the general average would affect at all the *scatter*, or in other words, the *relative differences* in mentality, or the percentage of the population making the various grades. Perhaps there is something in the criticism that the tests do not really test the individual's intelligence as such, but rather are samplings of his general level of performance of work. Certainly there are many valuable mental qualities besides those emphasized in the tests. Yet it must be said that the army tests gave results which were satisfactory on the whole for the purposes for which they were designed. They did enable the authorities to select the men who had the potentialities required for making a good officer, they did single out the soldiers who were too stupid to learn the minimum required in military training; they enabled the army to equalize the various military units, in such a way that by putting in each division an equal number of A, B, C, and D men, all could be trained with equal rapidity. Hence although the end in view was quite special, the results in actual experience would indicate that

the test did bring out real differences among men, and that these differences were of an intellectual nature.

§ 6

What can be said for the tests? I think much of the opposition to them is based on misunderstanding. Certainly those who devised the army tests did not make the claim that they were yet wholly accurate. One should distinguish between the results of the tests themselves and the inferences which are sometimes drawn from them. I understand that in colleges, there is a correspondence between the grade a student makes in his mental test and his general standard of college work. Behind the test there is a vast amount of serious research; and it cannot be charged against the psychologists that they have devised these tests in order to discourage radicals, or to bring forth new arguments against democracy. Certainly there is nothing in these tests that justifies the strong in exploiting the weak, and, as I said, we need not fear that psychologists are going to catch every one on the street, test him mentally, and hand him a card which will indicate his I.Q. and settle his fate.

If the tests are finally proved to indicate inherited mental ability, their social significance will be great, since it is fairly well established by the biologists that this type of ability can be increased in the world only by the right kind of selective breeding. It is too early yet to draw many sociological inferences from the tests. But of one thing we may be fairly sure. *Mental testing has come to stay.* There will be more of it in the future than there is at present. It will, of course, have to justify itself, and the methods will be perfected as greater experience is gained. Already there seems to be no denying the fact that *some persons are naturally mentally superior to others.*

This alone would seem to demand a reconsideration of the democratic dogma of equality. Once we get a scientific

statement of this fact, and better knowledge of the degrees in which men differ mentally, there necessarily will follow very far-reaching changes in our social philosophy. Already the tests have caused people to pay more attention to intelligence and its worth, and have called attention to a type of difference or distinction among men which heretofore has never been sufficiently considered. If men differ in the way the tests would indicate, it is difficult to see how we can, in the future, avoid coming to some sort of stratified society or 'order or rank' as Nietzsche would say. Society always has been stratified, but hitherto the distinctions recognized among men and given social importance have been fighting ability, power of command, ownership of land, the accidents of birth, the possession of property. Mental testing may eventually give us a new basis of distinction – real mental and personal superiority. With such a distinction generally recognized, there would be some measure of justice in the resulting form of social organization. There would be more promise of social advance. For the first time in history, men would be classified on the basis of their merits. Ability would have its opportunity. All society might go in for intellectual superiority. There would be more respect for human worth than has yet obtained in our affairs.

CHAPTER THIRTEEN

IS THERE A GROUP MIND? WHAT GOVERNS THE BEHAVIOUR OF PEOPLE IN SOCIETY?

§ 1

This question belongs to Social Psychology. It is a basic problem. What we think about it will determine our thought about many social questions. In fact, until we settle this question, we are unable to decide what social psychology is about. If we hold that the group mind is a reality, a sort of super-personal entity which exists over all the separate individuals who constitute society, and yet includes them in a kind of higher self, then the aim of social psychology is obviously to study this larger group mind. We should seek to describe those mental processes in society which are not individual. We should strive to discover how one group differs from another, and why. We should be concerned with the laws which govern the behaviour of this group personality. We should seek by analogy with individual minds to set forth the habits and purposes of this larger self, to learn how it becomes conscious of itself; how individual purposes are made subordinate, and individual wills controlled. We should probably be concerned with the sacredness of institutions; the authority of customs and traditions; the claim of society upon the individual; and perhaps also with the alleged diseases of the social mind.

If, on the other hand, we decide that the group mind is a fiction, a mere metaphor by which we give expression to the fact that there is a certain solidarity in the community, and that mass interrelations have some mental or psychological meaning – then the aim of social psychology is something quite different. Our aim would be to study the reactions of individuals to social situations, to learn what is the difference between satisfactory and unsatisfactory mutual adjustment. We should be interested in learning how individuals modify the behaviour patterns of one another; how they exert influences upon one another; how and why men seek happiness in

human fellowship, and why they so often hurt one another. We should wish to learn what motives lie behind certain social movements; what is the value of various social ideals, and whether the many proposed programmes of social reform will work advantageously. We should ask what are the causes of social unrest; in what respects people differ from one another and in what they are alike. We should want to know what human types are represented by the various kinds of propaganda which are current among us; and what are the general effects of new inventions upon the behaviour of men and women? We should wish also to know what is meant by social advance and who it is that creates progress.

In other words, if we take the first point of view we shall think of people in the *abstract;* if we adopt the second, we shall think of people in the *plural*, and as *concrete* persons who happen to be associated together in various ways and for the achievement of various ends. Statistically speaking, we may ignore the separate and individual characteristics of people and speak impersonally about tendencies and general characteristics. This would be only a manner of speaking. We should all along be quite aware of the fact that the *ultimate social reality is the individual*, who thinks, feels and acts along with other individuals more or less like himself.

I believe the latter to be the correct point of view. If we adopt it, I think we shall be able to answer all the real questions which I suggested under the first head, whereas if we adopt the point of view of the reality of the group mind, I doubt if we should be able to answer any sociological question very satisfactorily. For all we should be able to do would be to dwell upon the niceties of the analogies we might set up between the mentality of an imaginary individual and the equally imaginary collective mind.

One should be suspicious of attempts to approach social problems in an abstract and a priori manner. When we speak about that which includes everybody, we should ask whether we are not speaking about nobody at all. When we think of

the whole as something apart from us, superior to us, and having ends and sanctities of its own which are opposed to the purposes of any or all individuals, I am afraid we are merely setting up an idol. The day of idols is by no means over. The modern man too has his idols, and not the least dreadful of them is the idol of the group mind.

I am afraid of popular idols because they always seem to demand human sacrifices of their worshippers. The world has just passed through a period in which it may be said to have sacrificed many millions of its youth and a great bulk of the wealth created by centuries of toil. The idol to which the sacrifice was made, is that of the principle of nationalism, and nationalism is one of the forms which the idol of the group mind assumes. As Dr. Ralph Perry of Harvard University said, 'One is readily confused by the spell of such expressions as the "national life" or "humanity." How infinitely richer, it may be objected, is the national life than that of any of its members. But one who voices such an objection betrays the fact that he is thinking of everything that is American instead of just those things which are national. Only a very small fraction of the things which the American nation includes can be said to be done by the nation as such. The nation does, perhaps, own the public domain or claim cable rights on the island of Yap or return to a state of normalcy; in any case, the nation does not seek office, or beat its wife, or study Einstein, though all these things may be done by members of the American nation.'

Perry also says that 'to argue that society is a person in this sense is to commit the "elementary logical fallacy of composition." An army includes the soldiers, but it does not possess in its own right the characters which its members possess. It includes soldiers who write letters to their mothers, but *it* does not write letters to *its* mother.'

The human sacrifice to which I have referred above, is possible primarily because people think of states and nations as personalities having minds and souls, which are more

sacred than that of any or of all individuals of the nation. They make this principle of nationalism an end in itself, a super-person whose dignity must be preserved at all costs, and any slur against whom must be avenged even though the avenging destroy both the victors and the vanquished. If the principle of nationality exists independently of the members of the nation as a sort of group-soul, and if this soul has aims which are opposed to those individuals, it may be thought of as thriving even at the expense of everybody.

If men thought of the principle of nationalism as a mere *instrumental idea*, the case would be very different. Then the function of nationalism is to enable people in a given area to live together more happily, to direct their attention to common objects, to encourage in them similar habits of behaviour and to increase through mutual discipline and devotion a higher mutual self-respect. In other words, the nation would exist for men, not men for the nation; and this is right. But when men speak of a national mind, they are likely to conceive of this mind as a sort of invisible monster, a leviathan, like one of those long dragons carried on the backs of hundreds of men which one sees in pictures of Chinese parades. The business of this dragon appears to be to fight other dragons, to rest as a heavy weight on the shoulders of those who carry it, to keep them all in line, to cover their eyes so that they cannot see where they are going; also to terrify other people. By personifying it and idealizing it as a superior kind of collective person, the principle of nationalism becomes a menace to mankind, not, as it might, an instrument for good. And this is true of all group idols – church, class, race or party, or even humanity as a whole, when the group idea is made to appear to be not merely an idea which many men may entertain, but a thing in itself, more sacred than the persons who constitute the group. A group is not a 'thing'; it is simply a way of looking at the behaviour of people. It does not exist outside the thoughts and habits and relationships of individual persons.

§ 2

WHY PEOPLE BELIEVE IN THE GROUP MIND

The idea of the group mind arises so easily out of popular habits of thinking that I wish to show how it has come about. It cannot be denied that man is a social animal. From pre-human times every human being has come into the world as a member of a family. Whatever form the family may take, it is a social situation, and it is out of families that clans and communities have developed. Dr. W. Trotter, the English psychologist, sees in this fact that man is essentially social, evidence of the 'instinct of the herd.' This is not necessarily so. I have paid my respects to this alleged instinct in another chapter. It is sufficient to say that men normally grow up in an environment composed of other people. So important is this environment that the very idea of the self, as we saw in a previous chapter, contains elements which are essentially social. Before one can have an idea of himself, he must learn the use of the personal pronouns. In other words, he must have acquired language habits, and language is a social phenomenon. One must place himself in a certain social locus in order to think of himself as an individual, with aims and interests separate from those of other people; and this implies custom and training, all of which are social in their nature.

We live in a civilization. We partake of a certain type of culture which no single individual has created. This culture consists of habits that have been taught each of us by many individuals, both dead and alive, and so co-operative are these cultural elements that no single individual can ever hope to know or grasp all the material which makes up the culture of his people. Think what it would mean for anyone to know thoroughly a single one of our modern sciences. Let us take psychology as an illustration. It is doubtful if any individual can to-day know all about psychology. Wundt and

Stanley Hall attempted to do this, but encyclopædic as their knowledge was, they still left out much. One man knows a great deal about experimental psychology; another about the psychology of industry; another about mental testing; another has much knowledge of social psychology, and another specializes in psychopathology. There are certain points of view and methods common to all psychologists, but even here there may be no unanimity, so that this science, like all sciences, may be regarded as a co-operative affair. And when we realize how many sciences, arts, historical facts, customs, manners, and religious beliefs, go to make up our culture, we see that from one point of view this culture may be said to extend beyond the mental life of any individual. It is, from this point of view, impersonal and collective, and it is also mental in its nature.

But this is not to say that these various cultural elements sum themselves up into a 'social mind.' Not a single value or cultural fact, after all, has existence except when it is realized in the experience of somebody, somewhere. So when we say that a culture is a co-operative affair, we are really saying that many individuals, with interests which are more or less alike, and yet with different kinds of experience, are working together to make their community a going concern. Now popular thinking conceives of this going concern not as a way in which individuals adapt themselves to one another, but as a 'not-self,' *a thing* to which all individuals alike must adapt themselves. It is then held that society has certain rights which are opposed to individual interests and rights; that society consists of something, somewhere, which may be to blame for certain individual failures, or which owes individuals certain things, and to which the individual in turn has certain obligations.

It is held, therefore, that this larger individual, 'society,' has certain needs and mental traits just as the individual has them. There is a psychological reason why men should conceive of their social relationships as super-personal beings.

A child grows up in the family circle under the protection of father and mother. The actions of these parents constitute the orbit in which he is born and in which he moves for many years. They protect the child, supply his needs, and to them he learns to give obedience. Now it is natural that when the child grows to the age of adolescence, he should enter a larger world of social relationships. Yet we all tend to meet new situations in habitual ways, so far as possible. The adolescent youth, accustomed to the protection and filial attitude which constituted his relations to his parents, would make himself at home in his other social environment by thinking of that environment as far as possible in terms of his relations to his parents. Hence, *society is a sort of family*, and society is also a *kind of parent*.

Men always take a filial attitude toward the group to which they belong. Thus the church is the 'Mother' Church; the nation is the 'Father' Land; and in the personification of the group or society, therefore, it is possible for us as students of psychology to discover latent parent images. This personification of the group is a fiction, the function of which is to help individuals adjust themselves to one another by their all adjusting themselves to the image of an imaginary parent.

The popular attitude has been given some encouragement by scholars. We need not dwell upon the way in which the theologians have rationalized and elaborated these parent images. A scholar as far from the theological point of view as Herbert Spencer may be said to have lent support to this popular notion. Spencer, in his *Principles of Sociology*, has much to say about the organic conception of society. He conceived of a social body as having a life of its own, analogous to that of an individual organism. Just as the individual organism is composed of many cells, each of which may be thought of as a separate living being, so society may be made up of many individuals each of whom may be thought of as a cell in the social body. Just as the cells in the body may be grouped into special organs, the function of which is to serve

the whole, so the principle of differentiation and of specialization of function causes certain groups or classes of individuals to work in a like manner for the general social welfare.

Now Spencer was interested in applying the doctrine of evolution to social science. He wished to show that our religious beliefs, our sacred institutions, our moral codes and so forth, were all of strictly natural origin. The easiest way to do this was, therefore, to make use of a metaphor according to which social progress could be likened to the growth of an individual organism. Hence, the development of societies, like that of living bodies, is a process, not of addition from without, but of self-unfolding. The social body is hence as real as any body, and may have survival interests which are opposed to those of any particular individual. The social body also determines what this individual shall be. The individual living in one social body may be very different from the same person living in another.

This is a convenient metaphor. But it is only a figure of speech and, in some ways, it is an unfortunate figure of speech. I am not sure how far Spencer meant this analogy to be taken literally. Certainly he was unable to use this organic conception of society consistently. According to Spencer's doctrine of evolution, an organism is most highly evolved when the parts of it are most thoroughly integrated into a whole. Thus, structurally the nervous system of man is more highly evolved than that of a lobster, because the nerve cells are more completely organized into a single system. Functionally, the cells in the process of evolution gave up, to the organism as a whole, much of their original capacity. The simple living cell may perform all the functions of movement, reaction to stimuli, nutrition and reproduction. But in the highly evolved organism the various cells lose much of their original capacity, different cells performing different functions. Thus, biologically speaking, a highly evolved organism exists when the parts become most automatically *the slaves of the whole.*

Now in this sense primitive society would be more highly evolved than modern society, for in a primitive society, individual behaviour in nearly all respects is completely controlled by custom and taboo. As societies evolve, men outgrow to some degree this automatic social control. Reason is substituted for blind custom and habit. An individual ceases to be merely a member of his tribe, and comes to live to some extent on his own account. Herbert Spencer was a violent individualist. He feared the present tendency toward greater social control. He spoke of it as the 'coming slavery.' It is hard to reconcile all this with Spencer's organic conception of society. Therefore, he was obliged to speak of the social organism as a 'discrete' organism, to distinguish it from 'concrete' organisms. In concrete organisms the various cells are in immediate contact. They have to remain in their positions. They cannot emigrate, or have ambitions to rise to a higher social position in the body. Neither do they have any voice in the government of the whole. All living organisms are concrete. But what is a 'discrete' organism and has such a thing ever existed? Surely a 'discrete organism' is a contradiction in terms. It simply means an organism which is not an organism.

Now the curious fact is that much social psychology has rather uncritically followed Herbert Spencer in his organic conception of society. Just, therefore, as there is a social body opposed to the individual body, so psychologists, who think of body and mind as two things, like to believe that there is a social mind opposed to the individual mind. Ordinary psychology is said to be the study of the individual mind, but social psychology is the study of the social mind. Now, how is the social mind, as a mind which belongs to everybody and to nobody, to be studied? Here is where the social psychologist makes it very easy for himself. All he has to do is to sit in his study and to imagine an individual endowed with certain mental traits, consciousness, instincts, habits and so forth, then project these traits, magnified upon

a social screen, very much as a cinematograph operator projects the pictures on a screen. Thus the psychologist may very conveniently psychologize about society while sitting in his projection box. He does not need to go out and learn how people behave. All he has to do is to magnify the pictures in his head. When he is done, we have a rather useless book in which are to be found all sorts of imaginary social traits, labelled with names drawn from individual psychology. We get no new information about people. In fact, social psychology of this kind has nothing whatever to do with things that are really happening.

Thus the European social philosopher, Durkheim, is quoted by Perry as saying, 'If there is to be any morality or system of duties and obligations, society must be a moral person, qualitatively distinct from the individual persons which it comprises.' Espinas has been quoted as saying, 'Ideas and traditions mingle, and thus a process of communication between soul and soul is brought about which results in a real fusion of multiple consciousness in one soul.' The group acts and feels differently from the way in which any of its members feel and act. It is a higher spiritual entity, superior to anybody. It is a ghost made up of the impersonal and abstract idea of everybody when every concrete person is thought away.

If one wishes to believe this sort of thing, as a social philosophy, why not consult sources where at least such mysticism has the appearance of intellectual respectability? There is, for instance, Hegel, with his concept of the State as the self-unfolding idea. More scientific than the view which I have just suggested, yet still somehow clinging to the worship of the group mind, is the book *The New State*, by Miss Mary Follet. She holds that man is a mere point in the whole process, rather than a mind in that process. 'Individualism is an abstraction.' 'The individual is one who is being created by society, his daily breath drawn from society, his life lived for society.' 'When we recognize society as self-unfolding,

self-unifying activity, we shall hold ourselves open to its influence, letting the light stream into us.' One suspects that here is a type of Hegelian idealism of the State, or at least of Comptian 'religion of humanity.'

Ginsberg, the English social psychologist, has ably criticized this point of view, holding that it arises out of the confusion of the psychic processes with their content of what is experienced. Various people may in their thinking mean the same thing. But this sharing is *not a sharing of mental processes*, which, as James showed, are always unique and personal. Ginsberg further says that if there is a group mind, then this group mind should know its own mind. 'Are societies conscious of themselves? If they are, why is it so difficult to determine what the social mind thinks?' I might further add, why is it so difficult to get any substantial agreement, or uniformly intelligent thinking concerning any important social theme?

§ 3

THE PSYCHOLOGICAL THEORY OF THE GROUP MIND

Perhaps the most important statement of the case for the existence of the group mind in recent years is that of Prof. William McDougall, whose book, *The Group Mind*, written in 1920, attracted wide-spread attention. Prof. McDougall, now professor of psychology in Harvard University, and doubtless the best known social psychologist writing in the English language, is critical of the concept of the group mind as it is used by older psychologists. As I understand him, he is opposed to the idealistic notion of a collective mind. He says, 'Some writers have assumed the reality of what is called the collective consciousness of society, meaning thereby a unitary consciousness of society over and above that of the individuals comprised within it.'

McDougall flatly rejects this view. But as I see it, he rejects it only to bring it back in very much the same form. He main-

tains that society, when it enjoys a long life and becomes highly organized, acquires a structure and qualities which are largely independent of the qualities of individuals who enter into its composition and take part for a brief time in its life. And further, McDougall would after all appear to endow this social organism with precisely that collective consciousness, or mind of its own, which he has rejected. He says, 'We may fairly define a mind as an organized system of mental or purposive forces.'

He says, 'Under any given circumstances, the actions of the society are, or may be, very different from the mere sum of the actions with which its several members would react to the situations, in the absence of the system of relations which render them a society. . . . Does the system so created think and will and feel and act? My answer as set out in the following pages is that it does all of these things. . . . It is not because minds have much in common with one another that I speak of the collective mind, but because the group as such is more than the sum of the individuals.'

Perhaps our author here means to say that the group mind is not a transcendental principle, but is something which exists in individual minds simultaneously along with their personal consciousness, yet somewhat transcends that personal consciousness. However, I cannot see wherein this view differs materially from that of Durkheim or Miss Follet. Surely McDougall does not mean to say that this organized system of mental or purposive forces, in other words, the customs, traditions and values of civilization, is the same thing in all the individuals who compose a given group. For individuals in their social consciousness, must vary according to their personal experience. The group mind as a whole must be nothing more than the total result of the co-operation of many kinds of men. Yet, this is just what McDougall denies. The group mind is 'more than the sum total of the individuals which compose it.' He says that minds complement one another in society, but as Ginsberg observes, it

does not follow from this that the system which results is another mind, any more than that a house made of many bricks should be itself an enormous brick.

McDougall, like other believers in the group mind, seems to believe that the social mind is superior to any individual mind. It is true that conclusions which are reached as a result of the deliberations of many intelligent persons in conference may be wiser than the conclusions that any one of them would reach. But this is only to say that individuals may, on occasion, learn from one another. I belong to a club in which there are men with various types of professional training. One man is a professor of law in a university. Another is an able historian. Two are teachers of philosophy. One is an anthropologist. Several are sociologists, and there are a number of psychologists, each with a point of view all his own. Now undoubtedly the discussions of this group are enlightening to all its members, because each is trained to notice a special aspect of the subject under discussion, and each can contribute to the knowledge of all the rest some piece of information which probably the others do not possess. The total result is mutual gain in understanding. But surely the total effect of our discussions is to be found in the better insight which each one of us thereby acquires. No one would believe that we are, through such discussions, creating an independent system of 'mental or purposive forces,' which has a life and an existence of its own. We have not achieved a new mind outside ourselves; neither have our several consciousnesses fused and run together into a group mind. After all, our thinking is still individual and each of us receives from the others only such modifications as he can assimilate to his own thinking. What is not assimilated, what each one carries away in the secret of his own mind, is absolutely separate and plural. Taken together we might be said to have more information than any one of us possesses. But this does not mean that we possess a *collective consciousness which is wiser than all of us put together.*

If I am correct about the case just mentioned, the same must hold true throughout our social relationships generally. To say that the group mind is superior to the mind of the wisest man is sheer nonsense. Bernard Shaw says that public opinion is always wrong, and many would agree with him. If we select the wisest man, and then surround him with a group of foolish men, still there is no more wisdom than there is in the head of the wisest man. There is no more wisdom in society than there is in the wisest people, and they themselves would be just as wise if their counsel did not have to be compromised by the folly of the less wise.

This notion that the mass has some magical wisdom in itself just because it is the mass, is a modern superstition. It is a phase of our democratic idealism of the brute force of numbers. Public opinion certainly does not often represent the thought of the best minds. For example, I think it may truthfully be said, allowances being made for special cases, that the circulation of our great newspapers is in direct proportion to their vulgarity, sensationalism and stupidity.

§ 4

CRITICISM OF THE CONCEPT OF THE GROUP MIND

Now let us examine this concept of the group mind more closely. Is it possible that there is such a collective consciousness, or do we mean by the term merely the fact that in any community a large number of persons are so similarly modified by tradition and environment that their thinking regarding many subjects is more or less alike? What do we mean by the term 'mind'? We have seen that the behaviourists are very critical of this word, and I think rightly so, because most psychologists who use it, even in regard to individuals, conceive of mind as an invisible entity which is separate and distinct from the body. We have already seen that this concept is incorrect; that by the term

mind, we really mean certain ways of behaviour, so that at best the group mind could only mean certain aspects of social behaviour.

Even on the assumption of conventional psychology that mind consists of certain ideas, feelings and acts of the will, it is hard to see how anybody could believe that there is a social mind. To say this would be to say that there are collective and impersonal ideas. Now we know from James that there are no such ideas, and that the stream of thought is always personal. Thought is dependent upon a nervous process. The word *thought* is the past participle of the verb to think. Just as there can be no running unless some one runs, so there can be no thought outside the process of thinking. A thought exists only where the thinking goes on. There can be no collective thought unless there is a collective head to do thinking. Our several personal thoughts do not sum themselves up into a collective thought, any more than our various personal sensations sum themselves up into a complex feeling. Each thought is a single, unique pulse of consciousness.

The same is true of our feelings. We have already seen that every feeling is a sensation of a change which goes on in our own body. The idea that there can be an impersonal feeling, or a disembodied feeling, which can be felt by everybody, or nobody, is absurd. We might say the same of the will. Many persons may entertain a purpose about a certain object, and each man's purpose may be *like* that of the others. But this is not to say that their wills fuse into one will. The concept of the group mind, as I have elsewhere said,[1] is either *mysticism* or else *pure tautology*.

The concept of the group mind would seem to be at best only an analogy. If we try to conceive of any individual as distinct from the group in which he lives, we notice that there are certain similarities between his behaviour and that

[1] *Journal of Abnormal Psychology and Social Psychology*, Oct.–Dec., 1923.

of the other members of his group. But the likeness between the members of a group is erroneously conceived of as a likeness between the *individual and the group as a whole*, and as the behaviour of each individual is greatly modified by his contacts with other individuals, it is possible to think of much of the mental life of the individual as a social product. The group as such must then have certain mental qualities. So the student proceeds to psychologize, pointing out the similarities of the group to the individual.

Now this group mind either means that there is a psychological entity which is exclusive of individual psyches and yet includes them, or it means that for certain purposes individual differences may be ignored, and we may speak of collective behaviour as the behaviour of the collectivity. In the first case, the group mind is a mystical concept, and in the second it is tautological.

Individual minds do not sum themselves up into a collective mind which is different from any other mind. As there are no impersonal ideas or permanently existing ideas, there can be no common consciousness. My thought may be about my neighbour and his about me, but taken together there is no sharing of thoughts or mingling of subjects and objects. My thought may be like my neighbour's, also my behaviour, but *similarity is not identity*. What is shared in human association is the objective situation which the thought or behaviour is about, not the mental activity itself. There is no more reason for believing in a collective mind than for believing in a collective stomach. The concept arises through the intellectualist habit of ascribing independent existence to the mere fact that certain objects are alike in certain respects. The philosopher abstracts from the various objects that attribute in which they are alike, thinks of it as separate from the objects in which it inheres, and then in good Platonic fashion sets it up behind them as if it were some higher kind of being.

In the other sense the concept of the group mind is mere

tautology. Of course, there is much likeness between the individual and his group, for the reason that each individual is in certain respects like his fellows, and especially so when they have together acquired certain similar habits of mutual adjustment. In the psychological sense, the group is an objective situation which stimulates certain responses, and to which certain adjustments are made, but the objective situation as such has no mind or psychology of its own. The mind and the psychology ascribed to the group really belong to the several individuals in it, each of whom is a subject to himself and an object for the experience of the others. Thus the psychologist may, if he wishes, call attention to the mental similarities of the individuals within the group, comparing in turn the behaviour of each imaginary individual with that of the rest. He may speak of the similarity of behaviour as a 'group mind,' but it is difficult to see how such a concept will aid him in discovering the motives which impel men to this or that form of mutual adjustment. Neither does the concept of the group mind aid us in distinguishing the crowd from the normally social. Since by hypothesis the crowd must have its own group mind, a mind therefore within a larger group mind, we should still have the problem of the likenesses and differences of these two 'minds,' and of the relation of each to the mind of the individual.

Let us note some of the groups to which men are in the habit of ascribing this collective mind. First, there is society as a whole. What do we mean by society as a whole? Do we mean humanity in general? If we do, then what sort of unanimity or collective consciousness can we ascribe to the whole race? No one can conceive of the human race as such. It is a pure 'universal judgment,' and our ideas of it are always essentially symbolic.

Do we mean by society, *organized* society? But what, then, is organized society, and of what people does it consist? Even if by the concept, 'organized society,' we mean our own society, made up of normal people, is it not true that much of

our behaviour, much of that which goes to make up the sum-total of experience and knowledge of the world, is quite unorganized? Does not the organization of society consist primarily in a rather widespread agreement as to how we shall behave about such things as sex, property and respect for human life?

The same may be said of class. We hear much to-day about class-consciousness, but it is very difficult to make a clear definition of class. There is much talk to-day about 'the proletariat,' but I doubt if anybody can define the proletariat satisfactorily, in such a way as to make a clear-cut distinction among men. The best we can say is that in general a large number of persons have a similar relationship toward employing capital, and that this relationship, when they become aware of it, gives them certain objectives toward which they can all work. But this is not to say that they have a common mind.

We can say the same thing of a nation. I have heard many men try to define what they mean by the principle of nationality. Neither race, nor language, nor the occupation of a definite political area seems to be adequate. It is a disputed point whether nationality could be ascribed to Jews. Irish-Americans, or other 'nationals' who, though they have a keen sense that they are a separate people with certain traditions which they all share, nevertheless have no piece of earth on which they can act as a sovereign political group. And in the United States, if we are to listen to some of the super-patriots, nationalism is a thing which even the native-born possess only in degree. The elect alone fully possess it. Certainly, when we think of all the factions and differences and nationalities existing in the population of that country, we must say that, beyond certain gestures and words, in which conformity may be secured, nationality has comparatively little existence. If there is an American mind as such, I as a social student have never been able to discover it, though I have seen many persons who presume to speak in its name. I think they were, for the most part, speaking for themselves.

This is not to say that nationhood is not a very great fact among them, but it is to say that it is not a fact separate and distinct and independent of their several mentalities. As a matter of fact, society in any country or civilization at large is nothing but *the sum total of our habits of behaving together*.

There are further considerations concerning the group mind to which I wish to call attention. I wish to point out the psychology of the concept itself. As I have suggested above, this concept is valueless in social science, for it gives us no criterion by which we may judge which forms of social behaviour are desirable, and which are undesirable. How can it help us to determine which forms of social behaviour should be encouraged, and which discouraged? Again, the group mind does not give us any adequate account of what it is that holds society together. Society is really made up of many factors of mutual adjustment. We should put our emphasis upon these forms of adjustment, criticize and analyse them, and value them. We are not helped to do this, nor are we led to any consideration of concrete situations, when we assume that all these adjustments constitute a given and invisible entity.

The concept of the group mind grows out of the desire to treat descriptive ideas as if they were ontological or even causal. Certain ways of behaving together become stereotyped as habits and are taught by one generation to the next. The sum-total of these habits is what we mean by the social order. Now the believer in the group mind does not see that the social order is simply a descriptive term, signifying such habits, but thinks of it as a mysterious psychic *cause* of the habits.

§ 5

THE IDEA OF THE GROUP MIND IS HARMFUL

Again, the concept of the group mind leads us to forget, when discussing the evils of the social environment, that *we*

are each one of us environment as well as the individual who must adjust himself to the environment. We say that the individual is a product of his environment. Yet that same individual is a part of his neighbour's environment. To improve the environment, therefore, we must improve ourselves. Yet we all have a habit of speaking of the social environment as if we were not part of it. This leads us to the notion that we may improve society by tampering with some mysterious thing which is not ourselves. To improve society we must improve our own habits. We live in a day, however, in which it is fashionable to try to improve society by legal regulation of the group as a whole. We do not wait until we may persuade and convince; we do not even wait until we have ourselves formed desirable habits. We seek by legislative machinery to force reforms upon our neighbours, without their consent, oftentimes without any intention of obeying such legislative decrees ourselves. All this is a part of the impatience of the modern man. It also shows his superstitious belief that if by bullying and scheming he can have his own bigotry enacted into law, such bigotry becomes thereby, not his partisan wilfulness, but somehow an expression of the 'social will.'

Finally, the idea of the group mind is a mischievous idea. It is a survival of the old early nineteenth-century dogma that 'Society is God.' If this were merely a way of worshipping ourselves, it would be pardonable. But it is not. It is the worship of an empty abstraction. For the concept of society so held is one from which all concrete persons are thought away. Of all the gods that men have worshipped, I know none so barren, so lacking in grace and omniscience. This idolatry results simply in the deification of anything that happens to be popular at the moment. It is a way in which crowds seek to make their will supreme, and to gain sanctities for their partisan purposes.

The worst thing about this new god is that he has priests. Those who succeed in controlling the social machinery, who

can most easily give expression to the vulgar will, may justify themselves in whatever they do, on the ground that they are the agents of society. Hence, the mass, the undifferentiated man, is idealized. Distinctions of worth among men tend to be minimized. Social influence passes from people as persons to The People as mass. Truth is no longer a prime consideration. Everything tends to be translated into those forms of propaganda which will appeal to the greatest number; and, as appeal is made to mere numbers, mediocrity, which now must be convinced and now holds the balance of power, in all things sets the standards of value in civilization.

The result is enforced conformity in matters of taste and opinion, matters which are properly the subject of private judgment. It is this kind of belief, I think, which makes possible much of the intolerance so characteristic of these post-war days.

Progress is created in societies only by unique individuals. Men must have the right to challenge basic popular assumptions. That society is most progressive in which variation is permitted. Of course, we must adjust ourselves to one another, and there must be a general agreement about certain things, but to have really a community, as Dewey says, such agreement must be our deliberate judgment. *There must be assent.*

The fact that the mass believes certain ideas does not in any sense make them true. In fact, the presumption is against them. Stupidity and vulgarity always tend to bolster themselves up with a show of authority, to resort to coercion, to speak with finality, to impose mediocre dilemmas upon all, and to invent fictions which would make mediocrity appear to be supernal. The 'group mind' is such a fiction. Do not put too much faith in commonly accepted opinion. This is social stagnation. Do not make institutions ends in themselves. They are but instruments for mutual adjustment. Do not let any group make itself exempt from sane criticism. For this is intellectual suicide. There is no thinking in the

world that does not take place in the individual's brains. There are no minds but personal minds, no over-mind in society which can relieve us individually of intellectual responsibility. There are no goods which are good for no one in particular; no truths which cannot and should not be called to justify themselves at the bar of some individual judgment; no wisdom which is greater than that attained by the wisest. The right to private judgment and the duty of it cannot be obscured by any worship of the group as such. The path of freedom for every man, as well as his greatest opportunity for social service, is to learn to think clearly, calmly, courageously, and alone.

CHAPTER FOURTEEN

THE PSYCHOLOGY OF PROPAGANDA AND PUBLIC OPINION

§ 1

WHAT do we mean by public opinion? Whose opinion is it? What is the public? Much that I said in the chapter about the group mind applies here. You will remember that I said there is no such thing as a group mind, or collective consciousness, which exists independently of the persons who constitute a group. There are only individuals and individual opinions. Whatever the public is, therefore, it cannot be a group mind in the sense that the term is popularly used. Many people speak of the public as if it were a mysterious entity which held opinions different from the opinions of any person. In fact, the word 'public' is really an adjective used as a noun. 'Public' is the opposite of 'private.' It simply characterizes certain phases of the behaviour and thinking of persons. As Walter Lippman has shown, consultations with one's physician, the relations of lawyer and client, confessions to a priest, or conversations between the members of a family, are generally considered to be private matters; by which we mean that they are not the business of unknown persons. Public affairs are those to which we admit, as it were, a vast number of people. They are those things which are in a sense *on the street.* What I say in this chapter is public. It is published. But if I write a letter to my mother, that is private.

There would seem to be a difference between these two types of activities in which I as an individual am engaged. Of course, the public activities are my activities as truly as are the private ones. Yet I feel that in the things which I consider my own personal private affair, I am more truly myself than in the public activities. In a sense everyone performs these two types of behaviour. Privately, we may have an opinion about certain people. Publicly, we should be cautious, perhaps, in expressing such an opinion if un-

complimentary, even though we were convinced it was true. That is, as a private person I have to *answer to my conscience* and must face the results of my behaviour and experience. On my public side I must *keep up appearances*, have a record, keep that record straight. I am accountable to a great many persons who cannot know my experience and behaviour as I know it privately.

On the public side of my nature, I find myself trying to think of myself as I imagine other people think of me. As public, we pay deference to beliefs and ideas which run current among people of our time, without stopping to criticize them. We are more concerned with being like our neighbours than with being different from them. So we may say that the difference between the public and the private in us is really the difference between *two ways of thinking about ourselves*. When we think of ourselves and other people as part of an unknown multitude or mass, we are thinking of ourselves as public. When we think of ourselves in our concrete human relationships, we are thinking of ourselves as private persons. Think of humanity in the *concrete* and you think of individuals. Think of humanity in the *abstract*, and you think of the public.

It is on the side of the public self in us that we have membership in the various groups to which we belong. Each of these groups considers only part of our nature. It is interested only in certain aspects of our behaviour and thought. It abstracts. Thus there is a reading public, an eating public, a riding public, and so forth. The sum-total of these so-called publics, we may speak of as 'the public.' But you can see that 'the public' is not the same as the self of any of us. It is smaller rather than larger, since the life of every one of us contains more than is to be found in the sum-total of the various interests about which the groups to which we belong are organized. Therefore, the public in us is a pinching down of our real self, a standardizing of various aspects of our nature. In public we are always on parade, as it were. We

emphasize those things in which men are similar, and tend to ignore those in which they are unique. The public, then, is not a thing apart from us; it is simply one way of looking at people, a way in which we ignore their uniqueness. The public is, therefore, the abstract idea of every one with all concrete individuals thought away. The public is everybody and nobody, since it does not represent the real self of anyone. It is one of those fictions which we invent about ourselves, a fiction which may be either useful or harmful.

And now what is public opinion? Obviously it cannot be the opinion of some impersonal thing known as public. Public opinion consists of that opinion which goes along with the public self of each of us. It is the opinion we try to hold when we are 'on parade.' It consists of those beliefs which we accept second-hand, which we strive to share with an undifferentiated number of unknown persons, beliefs we imagine such persons would approve. It consists of those ideas which we try to think because we imagine our neighbours are thinking them, when, as a matter of fact, our neighbours are trying to think the same ideas, because they imagine we are trying to think them. Perhaps I can illustrate what I mean. When I was a college student I knew two men. One was a clergyman and the other the superintendent of the Sunday School in this clergyman's church. By and by the clergyman took me into his confidence, telling me that he did not believe certain articles of his creed but could not bring himself to challenge these dogmas openly because he was afraid he would deeply shock the good man who for fifteen years had been superintendent of his Sunday School and had always shown such implicit faith and devotion. A few years later I came somehow to be closely associated with this superintendent. By this time the clergyman had been called elsewhere. We were discussing him one day when the superintendent said to me, 'He was such a good man; he had such simple faith. I never did believe his dogmas, but for years I refrained from discussing these matters with him for

fear that I might give him pain.' Here were two men who were in closest contact for fifteen years and neither knew that the other was a liberal. Liberalism in each case was the private judgment of these men. The creed was their public opinion.

I am inclined to think that in most cases our private judgments are sounder and more honest than our public opinion. When we in our thinking defer to the imagined judgment of the multitude we must remember that we are not deferring to people as they really are, for, as I have said, the public in us is a caricature of us. And so, public opinion is *a caricature* of the real opinion of everybody.

We live in a time when the public in us tends to eat up the man. The enormous increase in the means of publicity, the standardization and mechanization of our modern world, all tend to depersonalize our thought of ourselves. In the dissemination of information the attempt must be made to strike at the average level of opinion. So the imaginary average, the mediocre type, becomes the standard in most public opinion. The mass is worshipped because it is many and powerful. 'The voice of the people is the voice of God.' Great organizations, each with its propaganda and partial interest in us, control our life and our thought. The State is interested in us only as 'citizens'; the newspapers, as 'circulation'; the merchants, as 'consumers.'

Thus, in adapting ourselves to our present organized social world, there is a tendency to leave out something vital in the nature of each of us. Hence, the opinions which belong to and serve the interests of various standardized forms of human association are not our real opinions. I should say that our private judgment has to do with our own experience, with the opinions we have reached through criticism and analysis. Our public opinion has to do with these automatic forms of thought and behaviour which are *imposed upon us from without*. When we exercise private judgment we are thinking with something inside our heads; when we give

expression to public opinion we are thinking outside the head, as it were.

Our public opinions are largely the result of economic and geographic accidents. They are made up of things we have been taught. They vary with changes of time and place. What public opinion holds to be true in one place or age, it may with the same implicit faith hold to be untrue in another place or age. Public opinion in persons of the older generation, especially Protestant Americans, is very Puritanical. Candid discussion of sex is taboo. The fiction is maintained that ignorance is 'purity.' There is a general attempt to keep up an appearance of innocence. What is 'decent' and what is 'indecent' is held to be a matter beyond dispute. Certain 'moral' judgments are held to be self-evident.

When I was chairman of the National Board of Review of Motion Pictures in America, I had many occasions to see such public opinion at work. Certain people just could not be made to see that there might be any honest difference of opinion as to what is decent. Oftentimes very silly and childish notions were held to be the expression of eternal right. I recall one case on which the Board was severely criticized, because it passed a picture which showed a lingerie shop in which a customer incidentally held up to view a woman's silk under-garment. The persons who objected to this picture were quite sure that all who did not agree with them were deliberately 'wicked people.' Now such a public opinion is not based on private judgment. The moral world is full of the self-appointed guardians of infantile taboos, who strive to turn the dilemmas of mediocrity into universal truths or categorical imperatives. Public opinion of this nature is mere class opinion. It is not the result of private judgment.

Similarly there is a public opinion among certain business men with respect to organized labour, which is not the result of private judgment. In the average Rotary Club, Chamber of Commerce, or advertising men's organization, there is an

amazing unanimity about the alleged aims and ideals of labour. The arguments used are always the same, if arguments they can be called. 'Unions mean inefficiency.' 'Trade union leaders are always calling unwilling and loyal working-men out on strike.' 'Unions rob the honest working man of his divine right to work.' 'Organized labour is only another form of socialism, and socialism means dividing up.' 'You cannot change human nature.' It goes without saying that this piece of reasoning, though many persons may honestly think they are convinced by it, is not reasoning at all. It is not based upon evidence and its speciousness is perfectly obvious to any unprejudiced person.

Likewise there is a *class opinion* current among certain liberals and radicals. The question is often raised whether there is such a thing as 'a working-class psychology.' I suspect there is for a large number of people. There is a current belief that 'labour produces all wealth'; that all persons who live without performing actual labour are 'wicked,' deliberate exploiters who scheme day and night new and more diabolical measures for 'reducing the workers to slavery.' There is a notion that people may be divided into two great groups, the all-good and the all-bad; the capitalists belong to the latter group – notwithstanding the fact that few radicals perhaps would decline to belong to this group if they had the opportunity. This god-devil psychology is an 'all-or-none' type of reaction and as such is not a matter of carefully scrutinized thinking.

This same characteristic of class opinion is seen in politics. A catch-phrase will always pass uncriticized. 'Wall Street' is the modern devil. We had an excellent illustration of this type of opinion several years ago in New York. It will be remembered that the 'Gary School,' because the newspapers gave this name to the type of schools first established in Gary, Indiana, was called a 'steel trust school.' Men saw in it an attempt on the part of malefactors of great wealth to train up working men's sons to be wage slaves. Likewise we

should call attention to the nonsense that has for seven or eight years passed as 'Americanism.' Most of this sort of thing was at bottom an attempt to bully and insult foreigners and to justify such behaviour by an appearance of patriotic devotion. The wildest and silliest rumours circulated among a credulous section of the population. Perhaps the climax of this type of public opinion was reached when the Attorney-General of the United States stated that there would be a bolshevist revolution on a certain May morning.

As public opinion is largely class opinion, so it is a matter frequently of geographical accident. In the Southern United States, public opinion is anti-negro and anti-alcohol; which does not mean that private opinion, however, is always quite so 'anti.' In the Middle West public opinion is anti-Catholic, anti-Semitic, and anti-foreign. There is a psychological reason why public opinion is so often 'against' some one. It is made up very largely of prejudices, and prejudice is hostility to that which is strange. Such hostility is seized upon and rationalized by crowds as I have tried to show, in the study of the psychology of the crowd,[1] in order to justify the escape of certain tendencies to cruelty in our nature. Public opinion, as I will show later in this chapter, has the function of creating a pseudo-social environment in which anti-social behaviour may be made to appear as devotion to moral principles.

Crowd opinions, rumours and fictions become fixed. Crowd thinking tends to be at best rather banal and platitudinous, ungenerous and intemperate, because it is necessarily the appeal to the mediocre majority. Such an appeal is almost always a low appeal when the man in the street holds the power that he does to-day. Even those more clever persons who write for this man, speak for him and presume to think for him, gain his good-will by flattering him in his ignorance and by encouraging him in his prejudices. Many of the things which motivate the average man publicly may be

[1] *The Behaviour of Crowds*, Harper & Bros.

absolutely irrelevant. Often an issue is still debated and people are bitterly divided concerning it long after it is dead. In the United States, the Fundamentalists with seventeenth-century ideas are quarrelling with such concepts as that of evolution, on which a century and more of science has modified the thinking of practically all educated people.

These persistent factors in public opinion are called by Walter Lippman *stereotypes*. Most propaganda consists of such stereotypes. Stereotypes are not easily modified by new truths nor are they established by research and evidence in the first place. The popular ideas about prohibition are stereotypes. When de Tocqueville visited America in the early part of the nineteenth century, he was much impressed with this stereotyping of American public opinion. He said:

'America is therefore a free country in which, lest anybody be hurt by your remarks, you are not allowed to speak freely of private individuals, of the State, or the citizens, or the authorities, or public or private undertakings, in short, of anything at all, except perhaps the climate and the soil, and even then Americans will be found ready to defend both as if they had concurred in producing them. The American submits without a murmur to the authority of the pettiest magistrate. This truth prevails even in the trivial details of national life. An American cannot converse – he speaks to you as if he were addressing a meeting. If an American were condemned to confine himself to his own affairs, he would be robbed of one-half of his existence; his wretchedness would be unbearable. . . . I know of no country in which there is so little independence of mind and real freedom of discussion as in America. In America the majority raises formidable barriers around the liberty of opinion. Within these barriers an author may write what he pleases, but woe to him if he goes beyond them. Not that he is in danger of an *auto-da-fé*, but he is exposed to continued obloquy and persecution. His political career is closed for ever. Every sort of compensation, even that of celebrity, is refused him. Those who think like

him have not the courage to speak out, and abandon him to silence. He yields at length, overcome by the daily effort which he has to make, and subsides into silence as if he felt remorse for having spoken the truth.'

This was many years ago, but the situation meanwhile has become much worse. There are many such stereotypes in America to-day – the idea that America is the land of the free; that democracy means liberty; that the poorest there has equal opportunity with the most favoured; that progress is inevitable; that if you are not an optimist you are a traitor; that big cities are immoral; that what the public schools give is education; that the Republican party is a Grand Old Party. It is a regrettable fact that most of the councils of democracy consist in the repetition of such phrases. There is in many democracies very little expression of genuine personal opinion concerning moral, religious, and political matters. Such phrases as are repeated carry a certain stereotyped emotional significance, but have helped us very little in solving the problems of our common life.

§ 2

THE VALUE OF PUBLIC OPINION

Are we therefore to assume that public opinion has no value? I think such an assumption would be unwarranted, for, although public opinion is nobody's opinion and although in most cases it is erroneous, yet the stereotypes of which I have spoken, could, under certain conditions, be made to serve important social ends. The regularity and order of human affairs is to a great extent the result of the fact that men accept certain opinions second-hand. They learn to respect ideas which they do not wholly understand. Certain mental habits are formed which result in commonly accepted beliefs. But we should strive to bring it about that these beliefs are true, for their effect in social behaviour is

something we cannot escape. It is essential that there should be some *common belief* among men, and perhaps even false beliefs are better than none at all.

If all men were wise, if they were capable of forming private judgments of such a nature that they could co-operate advantageously with one another, public opinion would be unnecessary. But even the wisest of men have not the time, nor the information, to scrutinize all human ways, or to settle for themselves all questions of faith. In fact, even the most critical and sceptical of men accepts a large portion of his opinions second-hand. Any social order at all rests upon such things as the commonly accepted respect for property, for human life, for law, and so forth. The beliefs upon which these respects rest may be very erroneous, yet in advance of correct opinion it is desirable that there be fairly wide-spread assent.

Many of the assumptions upon which our present social order rests will hardly stand the test of logical criticism, and our present social system is certainly anything but an adequate and a just one. But some order is better than none. I recently met a man who had gone through the Great War as a Hungarian soldier. He had suffered very much from privation; had been under fire many times; in fact, had experienced all the horrors of war. He had also been in Hungary during the brief period of the dictatorship of Bela Kun. He told me that he would rather go through the entire war again than live three days in the midst of the chaos which followed that breakdown of social order in his country after the war.

Certainly there are many really valuable things in our society, the survival of which depends upon the fact that there is a public opinion in their favour, even though there may not be a general and correct understanding of them. For instance, there is science. There is a public opinion in favour of science, and science is possible only because people who are not scientists still believe that science is a good thing,

and allow it to proceed notwithstanding the fact that they have not mastered its technique and do not understand very well its general principles. I suppose most people believe that the earth is round and that it moves about the sun. There is a general acceptance of the doctrine of evolution, the law of gravitation, the bacteriological explanation of infectious diseases, the atomic theory, and so on. Yet I doubt if more than a very small portion of the population could give an intelligible account of the ground upon which these beliefs are founded. In fact, the public acceptance of science is an act of faith just as truly as belief in the Church or the Bible was, in medieval times.

Even the most radical of radicals, after all, is a good deal of a conservative. He accepts many things on faith. For instance, the popular belief in 'Progress.' Not only does he not criticize the concept of Progress; he accepts it as an unquestioned fact, and does his best to accelerate it. As the late Prof. William Graham Sumner of Yale said, the great bulk of our popular beliefs is embedded in our 'mores' or folkways. None of us is able wholly to emancipate himself from the folkways. Were it not for the folkways, there could be no pointof contact in our various social situations. There could be no communication or co-operation among men. Public opinion, therefore, even though it is full of errors, is indispensable.

Although public opinion is indispensable, it is not necessary that it be left in *ignorance and folly*. Social progress consists in lifting public opinion to higher levels. The task of wisdom is not to abolish it, but to *correct* it wherever possible, subjecting it, as much as may be, to private judgment. This is why free speech, freedom of thought and of assembly are so tremendously important. They are the very basis of social advance. This is why the liberal spirit of tolerance, that rare quality which came into the world with the eighteenth-century free thinkers, and is to-day on the decline, is yet to be encouraged. Tolerance is not a mere sentiment of brotherly love or indifference to what people believe; but, once it is

established among men, it means that we have reached a turning-point in history. After that, human advance may proceed at a pace never before possible.

§ 3

A CRITICISM OF PRESENT-DAY PUBLIC OPINION

In discussing public opinion we should be much concerned about the low level on which it exists to-day. Why is it that, with a few exceptions, the newspapers with the widest circulation are those which are the cheapest and least sincere? Note the captions that appear in the films, and for that matter the pictures themselves. The reason for the present low standard is, I think, obvious. *The trouble with the film is the audience*. We have here a new fact in the history of art. All previous movements in art necessarily had to appeal to the cultured few, and hence the works of art reflected the mentality of the persons for whom they were created. With the coming of the 'cinema' and its 'quantity production,' it was necessary for the first time in history – at least modern history – that a form of art make its appeal to the man on the street. It was obliged, therefore, to present those things which reflected this man's mentality. If you want to know what public opinion is, go to a 'cinema'; read the fiction magazines; attend a religious revival; visit a music-hall; read the Sunday newspapers and their advertisements. If a man can kick a ball between the goal-posts from the middle of the field, the papers must devote many pages to him. If a man wins the Nobel prize for the most important work in Astronomical Physics, his name will remain unknown except to the few scientists who are his colleagues.

Now the standards of public opinion revealed by the things I have mentioned characterize it in all its manifestations. Political opinion is not at all more reliable or intelligent than is the reaction of the public to the 'pictures,' or to football.

One may wonder why public opinion is so persistently cheap and insincere. There are several reasons. First, the one I have suggested: *because of the type of thinker whose opinion becomes standardized.* We have learned from the intelligence tests one fact at least, and that is that the mental level of the average person is fairly low. Yet the way the spiritual life of the community is now organized (especially since the circulation of books and the printing of newspapers, and so on, must be made to pay commercially), makes it necessary that all things appeal to, and to some extent reflect, the mentality of the duller minds in the community. Any organization of our cultural life which makes it possible that mediocrity have a voice in determining what shall survive, *degrades the values of civilization.* I do not mean that the man on the street should not be permitted to choose his own amusements and be free to think his own ideas. I think that every effort should be made to educate him, but that he should not be put into a position where he decides what other people shall think and like.

Not only is the standardization of opinion according to the dilemmas of mediocrity being brought about by our present methods of quantity production, but it is also being achieved by the present trend of legislation. A number of southern legislatures in the United States have passed laws forbidding the teaching of Evolution in educational institutions supported by the public. We may yet see a constitutional amendment to this effect within a few years. The rapid growth of the censorship is another case in point. At one time there were over twenty State legislatures considering bills for the censorship of films. Now censorship is a form of propaganda. It means that any group which does not like itself to see certain things can, through political pressure, prevent anyone else from seeing them. The same tendency is seen in the proposed legislation in New York, the aim of which is to establish a state censorship of books. On the pretext that they are suppressing 'vice,' representatives of

'lowbrowism' are really doing their best to drag all intelligence down to the level of the lowest cranial altitude.

A second cause of the present low state of public opinion is the wide use of *propaganda*. The late Frank Cobb, editor of *The New York World*, said that public opinion in America is no longer free. He said that around all the sources of information, there is camped an army of press agents whose work it is to manipulate the public, that there were in 1919 about twelve hundred of these persons in New York City alone. During the war 'the government suppressed the truth; the government distorted the truth; lied glibly and magnificently when occasion seemed to require.' Now all sorts of agencies have learned the propagandist trick and have their special press agents. 'The great corporations have them; the banks have them; the railways have them. All the organizations of business and of social and political activity have them, and they are the media through which news comes. Even statesmen have them.'

He might have added that even churches have them. In the United States, vast sums of money are now spent, and the cleverest advertisers are employed, on the assumption that by cleverness it is possible to sell religion in the manner that soap is sold. A very illuminating fact was revealed in the recent trial of the superintendent of the Anti-Saloon League, where it was brought out that prohibition activities of the most far-reaching significance were supported in the State of New York by persons whose identity is kept a secret to this day. Mr. Cobb concludes that 'what the United States needs more than anything else to-day is the restoration of the free play of public opinion.'

One of the devices of propaganda is constant repetition. In order to get people to believe a lie it is only necessary to go on repeating it. As Prof. Santayana says: 'This happy people can read. It supports a press conforming to the tastes of the common man, or rather to such tastes as common men can have in common; for the best in each is not diffused enough

to be catered for in public. Moreover, this press is audaciously managed by some adventitious power, which guides it for its own purposes, commercial or sectarian. Superstitions old and new thrive in this infected atmosphere; they are now all treated with a curious respect, as if nobody could have anything to object to them. . . . A confused competition of all propagandas – those insults to human nature – is carried on by the most expert psychological methods, which the art of advertising has discovered; for instance, by always repeating a lie, when it has been exposed, instead of retracting it. The world at large is deafened; but each propaganda makes its little knot of proselytes, and inspires them with a new readiness to persecute and to suffer in the sacred cause. The only question is, which propaganda can first materially reach the greatest number of persons, and can most efficaciously quench all the others. . . .'

Another device of propaganda is insinuation. People may be inveigled into accepting such beliefs as certain interested persons wish them to entertain, by a sort of *flagrant duplicity*. While they are giving their assent to a proposition which in itself is quite innocent, it is made to appear that this proposition means something quite different. We had a great deal of this sort of thing during the war, when it was common for certain sales organizations to exploit their own interests on a pretext that the customer in buying their particular brand of goods was helping to 'win the war.'

Public opinion is everywhere about on the level of commercial advertising. As a matter of fact, *propaganda is nothing but advertising*. We should always look for what the propagandist has to *sell*, and should not be taken in by his big words. Professions of faith in ideals on the part of propagandists are only screens which hide their real intent. If you can get a number of people to agree to anything, true or false, you may turn that belief into a platitude, an abstraction, treat it as something final, something to be accepted uncritically. Then identify it with your own ulterior purpose,

smear it all about your purpose like the sugar-coating about a dose of quinine, and in swallowing the sugar men will swallow your quinine also. Most people will agree that murder is wicked. That being the case, those who wish to prevent any change of public opinion regarding the subject of 'birth control' need only argue that birth control is murder, the murder of unborn children, even before they are conceived. Hence, those who advocate the teaching of this subject do not only advocate something indecent; they are advocating 'murder.' So the Common Council of the American City of Syracuse passes an ordinance prohibiting all discussion of this subject, even discussion of the repeal of the present law. This is not an attack on free speech, of course. The city fathers are merely doing their duty in protecting human life.

With the propagandists' use of such concepts as law, lawfulness, and nearly all the generalizations used in crowd propaganda – 'justice,' 'brotherly love,' 'truthfulness,' 'virtue' become *mere instruments for working the will of some sect* or group upon the community as a whole. There is probably no word to which men will so uniformly assent as 'morality.' Nietzsche once said that the public may always be led by the nose in the name of morality.

Let the professional 'reformer' have his say, and he will capitalize your morality in the interest of his own prejudices. He will tell you that a man is known by the company he keeps; that no man can be moral who habitually associates with immoral persons. A man, then, is an associate of evil people, whether he knows such rascals personally, or invites them into his house as fictitious characters to practise their evil deeds *between the covers of a book*. If you read Shakespeare you are the evil companion of Falstaff; if you read Flaubert, you are an associate of Madame Bovary. Hence morality demands that the police edit our literature.

All this means that public opinion becomes a device for coercion. It means that by the use of clever propaganda,

public opinion can be *manufactured like bricks* and delivered anywhere. As I have said many times, *all propaganda is lies;* it is insinuation. It should be looked in the face without flinching. It should be met without compromise. It should be laughed off the stage by intelligent people. When I was chairman of the National Board of Review of Motion Pictures in America, I received dozens of resolutions, practically identical, which had been passed by uplift organizations: churches, ministers' associations, women's clubs, school teachers, and so on. The resolutions demanded that I personally should see to it that no motion picture show anyone taking a drink of liquor, and no woman smoking a cigarette. Now the National Board was not a censorship organization. It was merely advisory, and its main task was to help producers to free their products of vulgarity and insincerity. In other words, to improve the artistic character of motion pictures. Yet the greatest pressure was brought to bear upon the secretary and the Chairman of the Board to use this agency to compel the whole American public to conform to all sorts of provincial pseudo-moral ideas. Had I yielded in the case just mentioned, those people would have demanded still more provincial restrictions.

Finally, public opinion is to-day on a low level because of the *function of crowd ideas.* Crowd ideas are all rationalizations. They are not problem-solving ideas. To the crowd mind there are no problems. The crowd always knows the answer. Crowd ideas have the function of justifying the anti-social behaviour of the crowd itself. There are two aims that are always present when groups of men become crowd-minded. First, the crowd is a device for preserving the egoism of its members. In lauding one's crowd, one praises oneself. Second, the crowd mind is always hostile to some one. The easiest way to get a crowd is to raise an issue, denounce some one, protest against some 'evil.'

If private judgment is to exist, there must be less standardization of opinion. There must be more tolerance than the

masses seem now disposed to exercise or permit. The mass must cease worshipping itself, and this spirit of tolerance must extend to all classes.

One of the most disillusioning facts which has come to my notice in recent years is the alacrity with which the communists in Russia, as soon as they gained power, became a propagandist organization and set up a rigid censorship, quite as intolerable as that under which they themselves had suffered under the old regime. This was bad enough, but the action was approved by a large number of the working classes in other countries. I do not know how many times I have heard men say that ruthlessness, censorship, coercion on the part of the working class, should this class ever come into power, are quite justified by the fact that their opponents had resorted to the same practices.

Even the necessity of conserving the new order against counter-revolution could not justify this spirit. We had looked to labour once to help in freeing the world of tyranny and exploitation. When its proposed supremacy fails to hold out a promise of such liberation to mankind, labour necessarily must lose the sympathy of thinking men. When a society loses its spirit of tolerance, that society is *going down*. I am not pointing to labour here, as at all different from the other movements which exist in the world to-day. Catholics, Protestants, Prohibitionists, the Ku Klux Klan, and the Fascisti, are all evidences – evidence of the fact that a world controlled by the rank and file, a world in which uncultivated men scramble for power, in a word, a democratic world, cannot be a free world.

CHAPTER FIFTEEN

ARE THERE PSYCHOLOGICAL DIFFERENCES OF RACE?

§ 1

This subject, like religion, is difficult to discuss. Each of us necessarily belongs to some race, some of us to more than one. We cannot view the characteristics of our own race impartially, since they are also our own inherited traits. The idea of our race involves the idea of our ego. Every race considers itself superior. Anything that reflects upon its dignity gives us an inferiority complex. One of the surest ways of offending a man is to suggest to him that he belongs to an inferior race. If you doubt this, try it on an Irishman. The negro race in America has long been put in an inferior position, and there is a widespread belief that this race is physically and mentally inferior to the white race. Whether the negroes themselves accept this idea of inferiority, we cannot say, because, with the racial difference, there has been also involved the institution of slavery. Certain it is that the spirit of the negroes is changing. They are become race-conscious. There is a tendency among them to protest against the white man's assumption of superiority. What the future of this protest may be we do not yet know. But it is doubtful if negroes of the next generation will endure some of the things their people have endured in the past. They will insist that they are just as good as white people – an insistence which is certainly in accord with democratic principles, yet it may deeply offend that element of the white race, whose own protest against the feeling of inferiority consists in believing that, whatever else may be lacking, the lowest white man is 'better than a nigger.'

A similar protest against the white man's assumption of racial superiority is a movement now taking place in Asia. Mr. Wadia, the well-known Indian editor, has said that all over Asia there is an uprising of the darker peoples, especially of India and of the Orient. These people have been deeply

offended, and made to feel inferior, by the Colonial politics of the Europeans, and this even though the presence of the white man has, in some cases, been to the economic advantage of the Asiatics. The feeling of resentment toward the white man is so great, that we are told the time may come when a united Asia may take advantage of some moment of weakness, and not only expel the white man from the continent of Asia, but actually threaten the very existence of European civilization.

We see an instance of this race antipathy in the Gandhi movement in India. This movement is not directly inspired by economic or political considerations, important as these are in many ways. The British authorities are doubtless the most benevolent, tolerant, constructive alien rulers in history. Wherever the British flag has gone, there is cleanliness, order, peace, and education. The conduct of British affairs is the least corruptible that has ever existed in a vast empire. Even though the purpose of the British in dealing with darker races is that of economic exploitation, it has, in most cases, actually improved the material conditions of the subjugated races. This improvement is shown in the fact that the population of India has more than doubled under British rule. There has been, on the whole, a higher standard of living than that which existed before the British entered India. But there is one fact which, though it would seem incidental, is of great importance. British authorities cannot prevent English traders or soldiers, when off duty, putting on an air of superiority and calling the natives 'niggers.' The consequent resentment gradually grows until it becomes a storm of indignation. Gandhi's followers would do away with the white man and all his works.

Some people see in all this a serious menace to civilization. They even speak of the passing of the white race. This exaggerated alarm is expressed by the popular American writer, Lothrop Stoddard, whose two books, *The Rising Tide of Colour* and *The Revolt against Civilization*, have had a

wide circulation. According to the first book, the white race is menaced from without, and according to the second, it is menaced from within. Hence, the problem of race becomes a problem of social psychology, and deserves a discussion in our course of studies. I will first state the issue as the race psychologists have presented it. Secondly, I will discuss the case in the light of such concrete psychological information as we may have concerning the subject. Thirdly, I will strive to state what is the real psychological problem of race.

Now let us see what may be said concerning the psychological difference of race, and the possible effect of such difference upon the white man's civilization. No one will seriously deny that there are *physical* differences of race; differences in the colour of the skin, the texture of the hair, the facial angle, the shape of the skull, the formation of the lips, the structure of the skeleton, have long been noticed. Of these, probably the most noteworthy are the differences in shape of the skull. The so-called black race is characterized by a long head, the oriental or yellow race by a round or short head, and the white race by an oval head. It must, however, be said that there is much overlapping with respect to this characteristic, and within each of the races there are certain marked differences with regard to the formation of the skull. The question as to the alleged physical inferiority of the black race is commonly answered by the anthropologists in the negative. Negroes are very susceptible to infectious diseases in white men's civilizations. But this does not mean that they would have the same low resistance in an environment more congenial to them. They are physically strong. They have some characteristics which would indicate a racial superiority. Superiority is generally taken as indicative of the differences between men and the higher apes. In two or three respects, the negroes are further differentiated from apes than white men are. The skull is longer; also they have fuller lips. I understand, furthermore, that the length of the legs compared to that of the trunk is greater, and this

in marked contrast to the proportionate distribution of stature among apes.

Within the white race itself there are physical differences. The white race in Europe may be divided into three general branches: The Mediterranean, the Alpine, and the Nordic. The Mediterranean race is generally short of stature. It has rather sallow skin. The features are delicate and the head is fairly long. The Alpine race is short and thick-set. The complexion is dark, limbs stocky, and the head is the shortest of any branch of the white race. The Nordic race is prevailingly blonde. When the Nordic stock is pure, its individuals are tall, have light wavy hair, blue eyes, marked physical strength and long heads. The face is straight, the chin rather prominent. The Swede is typical of this best type, the peasant of Southern Germany of the Alpine type, the southern Italian of the Mediterranean type. In general, the geographical distribution of these branches of the race is as follows: Draw a line from Moscow west to the coast of Brittany in France, and from there back south-east to Athens. The persons north of this wedge are prevailingly Nordic. Those living within the angle which I have indicated and also inhabiting Southern Russia and the Balkans are prevailingly Alpine. Those who live south of the lower line, that is, in Spain, Southern France, Italy and part of Greece, together with about half the population of Ireland and 20 per cent. of the population of England and Wales, are Mediterranean.

Now it is said that where there are such marked physical differences, there must be corresponding psychological differences. Let us look at the argument as presented by those who hold that there are such differences. These differences are said to be manifest in the different types of civilization which the various races have developed, as, for instance, the civilization of China and our own. Against this we may raise the contention of some anthropologists and sociologists that the characteristics of a civilization are determined by the geographical environment. Such was the view of Herbert

Spencer and Grant Allen. This argument was, to my mind however, answered quite effectively by William James. I would suggest that the student read the essay, 'The Great Man and His Environment,' published by James in the book which bears the title *The Will to Believe*. James showed that this environmentalist argument is entirely too general; that while geographical conditions may have some effect upon the civilization, yet the advancement of the arts and culture in general is achieved by great men, the unique and creative individuals, of each community, and that geographical conditions cannot explain individual variation among the people of a given locality. It may further be said that if geographical conditions determine civilization, it would be hard to explain the rise and decline of civilization in a given country. Compare the type of civilization in the Greece of to-day with that which existed in the Periclean age; no one will deny that there has been a great decline. The geographical conditions have not changed in the last 2,000 years, but the racial stock which inhabits Greece has changed. The decline in civilization, whether or not it is the result of this change in racial stock, has certainly accompanied such change both in Greece and elsewhere. It was this fact which led Count Gobineau in the early nineteenth century to formulate his theory of the relation of race to civilization. I believe that most of those who write upon the problem of race have derived their ideas from Gobineau's works. In substance, Gobineau argues as follows:

Some races are essentially superior to others. Throughout history one of these superior races – Gobineau does not use the term 'Nordic,' but he means the northern or pure Aryan race – has played the rôle of the creator of civilizations. In fact it is argued that high civilizations everywhere have been the achievement of wandering bands of these Aryan peoples. Conquering the native stock, these Aryans are said to have made themselves the ruling class, and with their genius for government and for the arts of civilization they have, so long

as they kept their racial stock pure, forced upon inferior peoples their own forms of behaviour or civilization. When races are mixed, the superior qualities of this alleged Aryan race are lost. Gobineau finds that the civilizations of Greece and Rome, the earlier civilizations of the Mediterranean, even those of the Far East, have had their rise and decline coincident with the dominance and later decay of this Aryan stock. The cause of the downfall of civilizations is accordingly said to be the result of race mixture. Over the heads of the darker plebeian masses this pure white race has thrown itself like a bridge over a torrent. The inferior racial stock beats against the foundations of this bridge, seeking to overthrow it. Accordingly it is said that the masses of the common people never were really civilized, never have understood what civilization is. They have remained rather sullen and resentful while the superior race has imposed its culture upon them, and they are ready to overthrow that race in the first moment of its weakness. The moment for the catastrophe comes, it is said, when the dominant race becomes weak, losing its characteristic racial traits by interbreeding with the conquered peoples.

Something like this theory was also held by Nietzsche, whose 'blond beast' of pure northern stock was held to be the source of civilization and the dominant class in history. The difference between this pure northern and the conquered peoples is to Nietzsche's mind the difference between the aristocrat and the plebeian. In other words, Nietzsche holds that there is an actual superiority in the so-called upper classes, and that this superiority is the result of difference in race.

The theories of Madison Grant, Lothrop Stoddard and Professor William McDougall, are all very much like those I have just sketched. Stoddard's argument is typical. As we showed earlier in the chapter, he divides the European peoples into three races: A Mediterranean race, an Alpine race, and a Nordic race. He says that the Mediterranean race is tempera-

mentally emotional, passionate, excitable, lacking in stability and in tenacity, somewhat incapable of severe discipline, and lacking in genius for government – in fact he says that the Mediterranean race has never succeeded in establishing a stable government, that its chief achievements are the result rather of its sense of beauty, which is very keen, and of its artistic gifts. This statement at first appears quite plausible. The popular idea of the typical Italian or Spaniard is more or less in accord with what Stoddard says. Nevertheless these terms are altogether too vague. Just what does one mean when he talks about a race being temperamentally emotional? McDougall uses some such term as this to characterize the Nordics, among whom, he says, suicide and other evidences of brooding emotionalism are very common. Moreover, I wonder how true Stoddard's argument is. Does history bear him out when he says that the Mediterranean peoples have never produced a stable government? It is probably begging the question to say that the Roman Empire was created by Nordic peoples. The likenesses of the rulers which we have on coins and in works of sculpture do not bear this out; and certainly the Roman Empire was a stable government, probably the most stable government in all history. The same is true of the Roman Catholic Church, which as a political institution certainly shows that the Mediterranean peoples have the capacity for discipline and organization. The degree of discipline in the French army during the recent war was noted by many writers. And when we talk about stable government I am not sure that I know just what we mean. Is the United States Government stable? The genius of the English race is supposed to exist in its ability to govern, but I cannot believe that we are justified in saying that it is at the present time making a tremendous success of government in Washington.

Stoddard says the Alpine race is stolid, unimaginative, very gregarious; that it is unwarlike, clinging to the soil with dogged endurance; in other words, the typical European

peasant is an Alpine. This race has been conquered, it is said, again and again by the Nordics, but it always pushes back the conquering race, mixing with it, and finally crowding it out. However, its one achievement is its gradual extension over the territory formerly held by Nordics. According to Stoddard, this Alpine race has never contributed anything to civilization, either to the arts or to the sciences.

Again I have the impression that such writing is altogether too much of an over-simplification. Here again the terms are vague; few facts are brought up to support them. Indeed, I imagine that a strong case could be made out for the cultural superiority of Alpines. The Italian Renaissance was achieved by a mixed people, partly of Alpine and partly of Mediterranean stock. When asked if a people can be said to have imagination, the psychologist is somewhat bewildered. For if this term means anything, I should say that the colourful life, the folk-songs, and dances, and mystical religion, of Austrian and Tyrolean peasants would have to be regarded as indications that these people have imagination. Stoddard says that the Germans are largely Alpine. If so, how does he account for German music? Recently it has been shown that there is a very large Alpine strain in the Hebrew people. It is said that only a small portion of the Jews of to-day are truly of Semitic descent. The brachycephalic Jew with broad face and heavy dark hair is said to be an Alpine. I think I know the Jewish people pretty well, some of their good traits and some of their bad ones, but there is something that cannot be said about Jews, that as a people they are stupid, or that they show no interest in science or art. Incidentally, the Jew has had much to do with the development of modern music, and his interest in literature and philosophy is by no means negligible.

The Nordic race is, of course, Mr. Stoddard's favourite. He says that the Nordic is essentially 'a high-standard man.' The Nordic is said to be restless, energetic, courageous, warlike, independent, democratic, aristocratic, having a

genius for government, for moral restraint, for science. He is essentially an individualist, and on the whole, a 'master man.' This is the race which carries the white man's burden and which is, according to Mr. Stoddard, psychologically equipped for dominance, and for the achievement of the values of civilization. I suppose we are permitted to ask ourselves whether this flattering account is really true. The purest Nordic stock is in Sweden, but with all due respect to the Swedes, I have not noticed that they are culturally superior to the rest of Europe, or that Sweden has been especially distinguished for genius in government, or for scientific progress. Good people as the Swedes are, I think Austrian Alpines would compare with them fairly well in imagination, particularly with the Swedish peasants. I see very little difference between the Scandinavian peasant and any other.

Now let us turn to England. Stoddard says that England is 80 per cent. Nordic and 20 per cent. Mediterranean; and that the superiority of England consists in the fact that there are no Alpines in the British Isles, except in Ireland. The original Briton is said to be of part Mediterranean origin, while the blond Anglo-Saxon, the invader, is the true Nordic. In this respect I think it is interesting to note the physiological characteristics of the different classes in England. In what class do the blonds predominate? Unless my impression is entirely incorrect, I should say that the typical English aristocrat shows some Mediterranean characteristics, the oval face, olive skin and delicate features; in other words, the typical eighteenth-century portrait is the picture of a man with a strain of Mediterranean in his ancestry. The typical Anglo-Saxon is 'John Bull,' ruddy of face and with blond or reddish hair, thick and heavy and essentially practical. It would seem that the greater number of Nordics in England are in the middle or business classes. This is just an impression and is open to correction, but it is sufficient to raise the question.

In America the descendants of the English are not predominantly blond. Lincoln, Douglas, Webster, are perhaps typical. Recently I had a conversation with a very observing German scholar who was in America studying what he called the American type. He said to me, 'I can't understand you Anglo-Americans – you all look and act like Italians.' And if genius for stable government, respect for law and order, is a predominant Nordic trait, it becomes difficult to explain the Ku Klux Klan, most of whose members are 'white, Protestant, 100 per cent. and dry,' that is the Klan has adopted the assumed Nordic characteristics.

McDougall's discussion of the psychological differences of race differs somewhat from Stoddard's. McDougall says that the southern peoples are characterized by lack of curiosity, by vivacity, sociability, expressiveness, and that they are very much the 'extraverted' type. You will remember that in our discussions of Jung, we had occasion to note that he divides mankind into the extravert and introvert types. The extravert is the 'tough-minded,' as James would say; he is the person whose emotional interest is centred not so much upon himself as upon the objects in his environment. He is practical, not very meditative, not given to philosophy, but rather to science, a person of affairs. In other words, the extravert is to a very large extent the type of person Stoddard finds prevalent among the Nordics. Yet McDougall says that one of the marks of the superiority of the *Nordic* is the fact that he is an 'introvert,' given to taciturnity, introspection, subjectivity, and that in some sense his high degree of moral responsibility and of individualism are the result of his introversion. He finds that suicide is also a result of introversion, and that there is a distribution of suicide and divorce – which is geographically identical with the distribution of the Nordic peoples in the population of Europe.

Here again I think we are dealing with very broad generalizations. Curiosity, which McDougall says is a Nordic trait, is hardly consistent with introversion, since curiosity is essen-

tially interest in the objects of one's environment. McDougall makes much of the fact that the north is Protestant and the south Catholic, but I feel that he has taken too obvious a view in the matter. If there is such a distinction between northern and southern Europe, there may be a purely physiological racial cause for it. It is said that Mediterranean peoples reach their adolescence at an earlier age than do the peoples of the north. Now this earlier adolescence has certain sociological results, one of which is the tendency of Mediterranean peoples to marry at any early age and to bring up their children in the father's house. The family tie is probably strong among such people, and it is the *family image* which characterizes Catholic Christianity. The Pope is 'father,' so is the priest. The tendency to defer to authority and tradition is probably less pronounced in the north, for the reason that the northern youth reaches his adolescence later, and when he is mentally more mature. Marriage is postponed, and this physiological difference may account for the alleged individualism of northern peoples. However, before any such theory could be established, we should possess a larger body of exact knowledge than we now have.

§ 2

ARE THERE SUPERIOR AND INFERIOR RACES?

Let us now turn to some of the alleged racial differences among men, and see how great the psychological gap may be between races that physiologically differ very markedly. If we do not find any very great *mental* difference here, I think we are safe in saying that the alleged psychological differences in the white race itself are not established facts. Let us compare the black race with the white. In this part of our discussion I wish to refer to a paper on this problem written by Mrs. Dorothy Hallowell, and presented before a meeting of graduates of Pennsylvania University in May, 1923. Mrs.

Hallowell first takes up the alleged differences in sensory reaction. Are the senses of the darker peoples, the black and the dark brown races, superior or inferior to those of the white race? After discussing the senses of vision, hearing, smell and touch, the colour sense and reaction time, Mrs. Hallowell concludes that the alleged differences have been very much exaggerated, that as a matter of fact the popular idea that darker races are superior in this purely sensory respect to the whites is an error. People with brown eyes have been found to be on the whole more able to distinguish objects at a distance, but even here the blue-eyed sailor seems to be the equal of the brown-eyed Malay. It was found that training has much to do with excellence in this respect.

As to other psychological traits, perhaps the intelligence tests are the most interesting. Chinese and American Indians have been studied in comparison with white children. In one instance the Chinese were shown to be only 80 per cent. as intellectually efficient as the whites, but when rural white children were compared with white children in the city it was found that they showed still lower rating than the Chinese children. A number of studies have been made of negro children, and their intelligence rating compared with that of whites. In the study reported by Strong and Morse, one hundred and twenty-five negro children, ranging in age from six to twelve years, were examined in Columbia, South Carolina. The Goddard-Binet test was used, and the results were compared with two hundred and twenty-five white children of similar ages from the city and from the mill communities. The test showed that 25·6 per cent. of the coloured as against 10·2 per cent. of the whites were more than one year retarded; 74·4 per cent. of the coloured as compared with 84·4 per cent. of the whites were satisfactory; 8 per cent. of the coloured as compared with 5·3 per cent. of the whites were more than one year advanced. This looks as if the coloured race were intellectually less efficient than the white.

But when the children of the white mill hands were compared with the white children of the city, they were found to rank much lower, grading very little above the negro children. A test was made of fifty-five coloured students in the University of South Carolina, and the findings compared with seventy-five white college students. The result showed the average intelligence quotient of the whites to be 112 with a variation of 6 points, and that of the coloured 103 with a variation of 7·8 points. Here again the intelligence quotient of the negroes averages somewhat lower than that of the whites and the variation among them is greater. But the intelligence quotient of both whites and negroes in this instance was unusually high.

The results of the American army tests are fairly well known. The negroes on the whole showed a much lower grade than the whites. In this matter it is interesting to note, as I pointed out in a previous chapter, that northern negroes show a much higher average of intelligence than southern negroes. This difference is probably due to environmental factors. Experiments made by Ferguson showed that the negroes tested were, on the whole, about three-fourths as efficient as the whites. However, Miss Hallowell suggests that social opportunity has much to do with these differences, and doubtless many other factors have an influence here. She concludes that *the case is still unproved.* There are as great variations of intelligence among the white race itself as there are differences between the intelligence of the white race as a whole and that of the coloured race. Some of these differences run parallel to class distinctions. Ralston in Germany found that the children of the professional class on the scale there used averaged 85 points; those of the business class 68; those of the artisan class 41, and those of unskilled labourers 39. Similar class differences have been discovered among white children in both America and England, so that McDougall argues that there is a real superiority in the so-called upper

classes. Satisfactory evidence is still wanting to show whether this is true or not, and to supply a reason if it is true. When dealing with the American army intelligence tests in an earlier chapter, I pointed out that much research has still to be done, and notwithstanding the fact that attempts have been made to eliminate the influence of environment, it may still be argued that the intellectual differences indicated here are *not wholly* due to heredity.

If, in comparing the black race with the white, we take in a larger group of factors, such as the relation of the intelligence to language and logic, to the arts, to self-control and capacity for endurance, and æsthetic sense, we find that the problem becomes very complicated, and that there is a good deal of justification for Goldenweiser's statement, that from the standpoint of Anthropology, *no essential psychological differences of race are discernible*. Miss Hallowell warns us that we must be careful not to define intelligence in terms of those responses which are characteristic of our own type of civilization. But the problem arises, of course, why the civilizations of different races are so different. Are these differences due entirely to historical accidents? Many anthropologists think that they are. The question is still open. It would seem that *differences of mentality may exist between the races*, but racial distinctions are rather difficult to draw; there is much mixing of races everywhere, and certainly, if such differences do exist, they *also exist in each race* itself to a greater or less degree.

Comparing one race with another, all we can say is that the white man is on the whole better adapted to his own particular civilization. That being the case, it is probably essential to the survival of that civilization, that the white man predominates in the communities he has established. A great intermixture of other racial stock than white would probably result in marked changes in our social habits. But civilization is not the rigid thing that many imagine it to be. It is plastic, and very few thoughtful men would presume to say that our

present white man's civilization contains all the values that the human mind is capable of creating, or represents all the interests that a high civilization should secure. From the time of Rousseau, there has been very much serious criticism of our civilization on the part of thoughtful people. I doubt if we can make such a case for it, that we would be justified in resisting any modification of it, or in showing such an unwillingness to learn from other people as is evidenced by the Ku Klux Klan.

We should bear in mind the fact referred to above of the great differences in intelligence and in general mental efficiency that exist within every race. Those who have a high degree of intelligence are rare enough in all races, and perhaps the belief that one race is as a whole superior to another is cherished in part because *it is a consolation to the mediocre members of every race*. Within each race the variations in mental capacity are in some degree, perhaps to a very large extent, inherited. The native differences in superiority among men are not therefore coincident with their differences in race. Social psychology must take account of the fact that *some men are by nature superior to others*. This fact has been too long ignored in our democratic age. One way of ignoring it, or of evading its significance, is to encourage the fallacy that the principal mental differences among men in this respect are racial.

If we cannot establish clearly any definite psychological differences between the *white* race and the *black*, certainly no such differences as Stoddard imagines to exist can be shown to differentiate the various branches of the white race itself. Assuming that originally there may have been certain inherited differences between the Nordic, the Alpine and the Mediterranean races, it is doubtful whether we should call these differences of *superiority and inferiority*. And whatever differences may have originally existed, it would seem that they are in the process of being obliterated.

§ 3

THE REAL PROBLEM OF RACE

I have just said that our civilization would doubtless show some modification as a result of race mixture, where the differences in race were as great as they are between the white and the black, or the white and the Asiatic. But if there is danger of losing whatever is good in civilization to-day, that danger arises as a result of the *mental differences in the white race itself*. We cannot make mediocrity and dullness the final arbiters of our values, as we have done in democratic society, without having as a result a marked slump in the values of civilization. There are many evidences that such a general decline is in process among us at the present time. Nietzsche thought so, and his contentions are borne out to some extent by a comparison of our modern journalism, our cinemas, our popular magazines, our popular music, and the like, with the intellectual and cultural standards which prevailed among the upper classes a century or more ago. It would seem that cultural values, if they are to survive, must be committed to the care of the mentally superior in whatever class or race such persons are found. When committed to society as a whole, they are of course given over to the hands of the average and mediocre man, and they suffer as a consequence.

It is also maintained, and I think with a good deal of evidence to support the contention, that within the white race the proportion of persons of low inherited mental qualities is increasing in ratio much more rapidly than that of persons of a high type of mental capacity. It has been shown that the men who ranked 'A' in the army intelligence tests are not reproducing their numbers, but that the 25 per cent. who made the lowest grades are producing 50 per cent. of the children. That percentage will be greater in the next generation than it is in this. There is therefore something to be said for the argument that selective breeding within the

white race is *disgenic*, and this is the real problem of race.

The physiological problem of race then is this: the problem of keeping alive in every race those strains which are most capable of contributing something of value to human life. This is a serious problem, because no plan has yet been devised for achieving such an end. It has been argued that to keep up the racial stock, the unfit must be eliminated, and that our modern methods of sanitation, our concern for those who would otherwise be crushed in the competitive struggle for existence, our charities and child welfare activities, in general, are ill-advised because they keep alive and cause to multiply many inferior racial strains.

Undoubtedly we have decreased infant mortality in recent years, and this decrease has been most manifest in our city slums. An infant born in the slums, though born in squalor and poverty, has a much better chance to survive to-day than ever before in history. Hence the present absolute increase in population is said to be very largely an increase in the slum proletariat. There are writers who even go so far as to suggest that we discontinue our public charities, and that the most merciful thing we can do is to permit the weak to be pushed to the wall. I think such an argument fails to take into account several important factors. In the first place, such a destruction of the weak would be by no means confined to persons of this type. The infectious diseases from which they would die would spread throughout the community. Of course it would be said that even this is not an unqualified evil, since the diseases would sweep off those families which have the lowest resistance to infection, and low resistance is generally considered a mark of degeneracy. Nevertheless, few people would seriously argue that we should increase disease and encourage epidemics for any such reason.

Again it has been argued by Professor S. J. Holmes, the eminent zoologist of California University, that the elimination of the unfit is not the simple matter some easy-going writers imagine. In fact Holmes argues that a class is not

exterminated when its standard of living is lowered. On the contrary, it is just the families on the border-line of starvation which have the largest number of children. Holmes does suggest one thing that has some interesting bearing on the matter of eugenics. He says that a large proportion of the children who die within the first year, are really killed by mothers who are too stupid to learn how to bring them up, and he says that if these children should survive they would inherit the mother's stupidity. He seems to think that where infant mortality is the result of bad economic conditions it should be prevented, but where it is the result of the stupidity of the parents we might better let natural processes take their course.

However this may be, it is my opinion that the racial stock could be improved if we kept in mind the *eugenic significance of much of our legislation and general social policy*. What I mean is this: a large part of our reform legislation, such as censorship and other measures, represents the dilemmas of morons, and has the effect of keeping fools alive by protecting them from their own temptations. We ought to resist any such tendency, and to cease giving support to the dilemmas of mediocrity in general. We should ask of any proposed reform whether it tends to protect lower minds from the results of their own shortcomings, and further, whether in removing from men the necessity of choice and of moral responsibility, such reform may not give the stupid an advantage over the more intelligent in the struggle for existence. Furthermore, we should work for such modifications in the social order as will more nearly give to every child an opportunity to demonstrate what is in him, and to enable him to find his own level. Much of the privilege that exists in the world to-day prevents just this.

Social psychology lends very little support to race prejudice. The social psychologist can generally analyse race prejudice, and see that it is largely a mere protest against a feeling of inferiority on the part of the lower elements in the dominant

race. The real concern of social psychology is with these lower elements themselves. By revealing the true motives of much social behaviour, the psychologist can lead us to recognize lower motives for what they are, and with such recognition we may be able to act so as to encourage the more desirable types. One thing at least is possible, and that is a change of attitude toward the mass as a whole. The idealization of the mass is the idealization and worship of mediocrity, of undifferentiated man. It ignores distinction among men, and hence destroys the very basis upon which the values of civilization rest. To the psychologist there are only two races of men, higher men and lower men, and these two types exist in all nations. There are higher white men and lower white men, higher black or yellow men and lower. All higher men have a common task. They should learn to work together. Their struggle is not against men of different colour or shape of head, but against the mean little men of all races, their own included. The outcome of that struggle will determine the final outcome of civilization everywhere.

CHAPTER SIXTEEN

ETHICS IN THE LIGHT OF PSYCHOLOGY

§ 1

In one of Shaw's plays, 'Major Barbara,' there is a discussion between an innocent young man and his father. The father's ethical philosophy has shocked the youth who is, at the time, being questioned as to his future prospects. The father is trying to discover what the young man knows. Conventionally brought up as he is, however, he seems to have no adequate practical knowledge of anything. Finally, the father, in despair, says: 'Well, come! is there *anything* you know or care for?' The son replies, 'I know the difference between right and wrong.' The father is hugely tickled and says: 'You don't say so! What! no capacity for business, no knowledge of law, no sympathy with art, no pretension to philosophy; only a simple knowledge of the secret that has puzzled all the philosophers, baffled all the lawyers, muddled all the men of business, and ruined most of the artists: the secret of right and wrong. Why, man, you're a genius, a master of masters, a god! And at twenty-four, too!'

Shaw here has caricatured a very common psychological fact. There is probably no subject concerning which there are so many amateur authorities as you will find in matters of right and wrong. Everybody knows what is right – knows what his neighbours should do on all occasions. Men have a habit of reducing the rules of behaviour to the most uncompromising and universal principles. They know the rules, even though few meditate upon the ends or results of behaviour. It would appear that every one possesses some a priori knowledge so that, in advance of experience and without information concerning the situations in which the distinctions between right and wrong exist, men may with perfect assurance presume to pass judgment.

As a matter of fact, there is very little real thinking on the subject of ethics. Moral judgments are for the most part mere repetitions of made-in-advance formulæ. The average

man's morality consists very largely of popular prejudices and taboos. When a matter becomes a moral issue people stop thinking about it, merely strike an attitude and take sides. There is very little study of the circumstances under which an act has to take place; very little criticism of the ends of conduct; very little appreciation of the values at stake. Moral ideals are used commonly to rationalize and justify and give an appearance of eternal righteousness to all sorts of issues which really have nothing to do with the ideas which men associate with them. The man who makes a serious study of moral ideas rather shocks us. We feel that he must be a man without any principles. Ethics is commonly a dark subject, filled with obscurantism, pretence and the spirit of coercion.

The subject of ethics is so important, however, that it deserves our most serious and courageous thought. It controls human behaviour, and therefore is of primary interest for the psychologist. Yet very little psychological study of ethics has been made. Such a study is difficult, for it is almost impossible even for the scientific student of human behaviour to refrain from moralizing. People want a gospel. They wish to be told on authority what to do and what to believe, especially if the authority happens to support them in what they already believe and wish to do. Most moral philosophers are, after all, special pleaders, each having his own view of life, each arguing for his own ethical system, each striving to convert people to his ideas. This will be quite evident if you call to mind the writings of some of the great moral philosophers. Immanuel Kant with his 'Categorical Imperative,' a theory which we will discuss later; Jeremy Bentham with his principle of the 'Greatest Happiness'; Spencer with his Hedonistic view; Nietzsche with his 'Transvaluation of Values,' are all excellent examples. Kant's ethics is really a plea for equalitarian democracy, a theory expressed in abstract and transcendental terms. Bentham's and Spencer's ethics turn out to be a plea for individualism;

Nietzsche's an argument for aristocracy. Each is striving to make people be good, in his own particular way. Perhaps a strictly impartial and scientific attitude toward this subject is impossible; for moral ideas, if they are genuine, lead to certain kinds of behaviour, and we cannot help choosing what sort of behaviour we prefer.

Nevertheless, let us try to see what morality is made of. Instead of seeking to make people good, let us see what they mean by their different kinds of goods. I will ask two questions, and strive to discuss these questions from the psychological standpoint. (1) *Why do men say that some things are good and others evil or bad?* (2) *How can we know that we are right?* There are many other problems besides these two which deserve study. But these are doubtless the most important questions we can ask about ethics.

Why do men say that some things are good and others bad or evil? In the first place, let us notice what things they judge in this way. The judgment of good and evil, so far as it has to do with morals, is not a judgment about objects, but a judgment concerning *human actions*. The *moral* judgment is a judgment about behaviour. The judgment concerning *things* is an *æsthetic* judgment. Æsthetic judgments sometimes have to do with moral judgments; that is, there are some philosophers who believe that moral judgments are based upon æsthetic judgments. I believe that Nietzsche had some such view. Plato also expresses such a view when he says that 'The Good,' 'The True,' and 'The Beautiful' are the same.

Perhaps a psychological study of the *æsthetic judgment* will throw some light on what we mean by the *moral judgment*. Every one knows what we mean by the word 'good' in the æsthetic sense. We mean that which looks good, tastes good, smells good, feels good; that which gives us pleasant sensations rather than displeasing ones. A behaviour psychologist who does not admit that psychology has anything to do with feeling nevertheless has his own equivalents for these two

kinds of reaction to sensory stimuli. He would say that we have a 'positive' reaction tendency and a 'negative' reaction tendency. The positive kinds of responses are the ones which most psychologists call pleasurable, and the negative kinds those which they call painful or unpleasant.

The word 'æsthetics' comes from the Greek word which has about the same meaning as *sensuous* or sensory. It stands for those distinctions of pleasantness and unpleasantness which are given us immediately by our senses. We all know the difference between the smell of a rose and that of stale drains. The first is a good smell; the second a bad smell. This distinction is not based on any theory. Likewise, there is the distinction in sounds. That, for instance, between a clear tone or a musical harmony and what we call a harsh note or a discord. Likewise, we have an immediate sense of differences in taste, between benedictine and asafœtida. There are similar differences of good and bad in the objects of sight. Every one knows the difference of feeling between looking at a stained-glass window in a cathedral and looking at a row of garbage pails. This æsthetic difference between good and bad is something immediately given to us. It is a quality of our reaction to stimulus.

In and of itself, it is doubtful if we could say that an object is good or bad, but we are so constructed as a result of evolution, that our reactions to some things are necessarily pleasant and to others necessarily unpleasant. The æsthetic judgment belongs to our inherited reflexes. Of course, sometimes the reflexes may be conditioned. In other words, we may have certain *acquired tastes*, like the taste for olives or whisky. Again, people's tastes may differ. There is no absolute standard of the good or beautiful in the æsthetic sense. Some people like Limburger cheese; others do not. The same is true of tobacco smoke. The Turks are fond of stout women, considering them very beautiful; the English and Americans seem to prefer the opposite type. Some people like Jazz, and there are many who consider tattooing

a personal adornment. We may not agree as to *what particular* thing is good or bad, but we all agree in one thing: in the *immediately known differences* between those things which – whatever they happen to be – taste or feel good or bad. That is, we all know *good* and *bad* as something immediately given in experience. We all agree that *something* is good, and *something* is bad. This distinction is an irreducible fact.

§ 2

THE PSYCHOLOGY OF THE CONCEPTS RIGHT AND WRONG

Now, what is the relation between our saying that some *things* are good and others are bad, and our saying that some *actions* are good and others are bad? Is the moral difference between good and bad something given immediately in experience like the æsthetic difference? There have been philosophers who have held that this is so. Nietzsche believed that our moral judgments were in the end æsthetic judgments. To some extent, this is doubtless true. There are some actions which may be said to be beautiful heroic deeds, and acts of magnanimity have an æsthetic quality. We are thrilled when we see or read about them. When we witness an act of cruelty, we have a feeling which seems to be as immediate as the unpleasant reaction we have when we see something ugly. Also, as Nietzsche says, we admire ourselves. Each type of man wishes to believe that his kind is 'the good,' and that men who are not like him and his kind are inferior, or bad, or wicked men. This æsthetic judgment about *ourselves* is carried over to the *actions* which are characteristic of each kind of man. People like their own ways. What *we* do must be good, because we good men do it. Moreover, there is such a thing as making of living a sort of work of art. People speak about the 'Beautiful Life.' The English gentry and the Chinese have, in different ways, sought to give to behaviour some such æsthetic quality.

Yet the æsthetic judgment and the moral judgment are not always the same. Moral values are not given to us as immediately as æsthetic values. There is much more conditioning of reflexes, much more that is acquired, that is a result of training in the moral judgment. Often the good and the beautiful do not seem to go together at all. Alcibiades is beautiful. Alcibiades is not good. Socrates is ugly, but Socrates is good. The Venus de Medici is good from the æsthetic standpoint, but she does not necessarily inspire in us a moral judgment of the good. In the experience of a Casanova or a Don Juan, there is doubtless much that is æsthetically good, but we can hardly say that such characters are morally good. Shakespeare's Sonnets are among the most beautiful poems ever written. Yet I have little doubt that if Shakespeare were alive in America to-day and published these Sonnets, his book would be suppressed by the Society for the Prevention of Vice. The medieval monks found much enjoyment in reading the verse of Ovid. They did this, however, because they were cultivated men who loved beauty. It is not generally considered that their interest in Ovid was primarily an ethical interest.

In fact, if we look to history we see that so divergent are the æsthetic and moral judgments, that their goods have often been considered opposites. This sense of the irreconcilability of the two kinds of good is a basic principle in the Puritan philosophy of life, and is seen in the fact that in those communities where there is the greatest concern for morality, there is frequently much ugliness. And the converse of this is often true. The great ages, the ages characterized by cosmopolitan culture and artistic creation, have not been the most moral periods; but rather the reverse. An illustration of this is the Italian Renaissance of the fifteenth century. Luther saw in the Rome of the Renaissance the sink of every abomination. Erasmus, whose interest was more intellectual and æsthetic, saw in Renaissance Italy a glorious period of human advance. Both were doubtless correct.

The same divergence between the ends of the æsthetic and moral judgments is illustrated in two statues in the Metropolitan Museum of Art in New York City. The statues are, curiously enough, by the same sculptor, Donatello. The first is the youthful David. Here we have a beautiful body, very much alive, and full of action, a truly pagan conception, in which there is complete indifference to the ends of morality. The other statue is that of John the Baptist. Here is the embodiment of Christian piety and ethics. It is also the embodiment of ugliness. The face is drawn with pain; the body is emaciated and half starved; misshapen and decrepit; even the clothes are ragged, and suggest dirtiness. The whole figure symbolizes the squalor and wretchedness of life in this wicked world. The David statue is an embodiment of the æsthetic good, the figure of John the Baptist, of a moral good. Of course, the moral good typified here is only one judgment concerning the good.

We are not now interested in what *is* morally good, but in the *judgment* that some acts are good and others bad. We find that the moral judgment and the æsthetic judgment are not necessarily the same. The distinction I wish to make between them is primarily this: the æsthetic judgment is our judgment about *things* and the way they stimulate us; the moral judgment is a judgment about *deeds*. The latter is not merely a carrying-over into our estimate of human behaviour of the immediately known sensory difference which characterizes the æsthetic judgment, it is a judgment of a different kind.

Why, then, do people say that some actions are good and others bad? Various answers have been given. The first is the theory that *custom* has inspired men to call some things good and others bad. That which is customary is good; that which is 'not done' is wicked or bad. Hence men knowing the difference between that which is customary and that which is unusual or contrary to established habits, have been led to judge their actions by this difference. The theory has

some philosophical support. The word *morals* comes from the Latin word *mores* which W. G. Sumner translates 'folkways.' The Greek word *ethics* comes from the word '*ethos*' which means manners or habits. The word *ethos* is probably derived from the verb 'etho,' to *get used to*. There is something to be said for the idea that manners and morals are identical. Habit has much to do with both. Moral training consists in the formation of those habits which are approved by the community.

But this theory does not explain how the habits or customs arose in the first place. It explains rather *what it is* that men hold to be good. Custom is a criterion of behaviour, but custom itself must have had an origin somewhere in the psychic nature of Man. It must be the outgrowth to some extent of the moral judgment. Moreover, the theory does not allow sufficiently for the place in history of great moral leaders. We hold that men like Socrates and Jesus are essentially moral. Yet that which interests us in the moral teaching of such men is the fact that they differed in certain respects from the customs of the people among whom they lived. Socrates was put to death on the charge that he corrupted the youth of Athens. This was because he strove to analyse moral custom, and make the guides of behaviour more rational. Jesus says, 'Ye have heard that it hath been said "an eye for an eye, and a tooth for a tooth." ' But he tells us to behave otherwise. So in his teaching, the institution of the Sabbath is humanized. The Sabbath exists for men, not men for the Sabbath. Jesus shocks the moralists of the day by eating with publicans and other sinners, and by saying that publicans and harlots will enter the kingdom of heaven in preference to the Puritans. Jesus is a moral nonconformist, and were he alive in the world now, he probably would shock the good people of our age just as tradition has it that he shocked those of his own time whose righteousness consisted chiefly in conformity to custom and tradition.

As Dewey says, it is one of the tasks of true morality to

criticize and modify at times the customs of one's age. If custom is the basis of the moral judgment, it is difficult to see how there could be any moral progress in history. I admit that there has not been much. We talk a great deal about moral progress. But we still practise and glorify war. However, we are perhaps less barbarous in this respect than were the ancients. An ancient Assyrian inscription tells us how the king offers to his god a large pile of ears cut off the heads of his captives. It was, moreover, the custom in ancient times to put the civilian population of a besieged city to the sword, or to sell the captives into slavery. While it is not customary for us to do this sort of thing, yet in the late war, it cannot be denied that there were many instances where war was made on non-combatants. The Bible says that Samuel hewed Agag to pieces before the Lord. We have learned more human ways of disposing of our enemies. So there has been some moral progress. Altogether, custom alone does not account for the fact that men say some things are good and others are bad. It rather operates to preserve, often in obsolete formulas, the common man's idea of what is good or bad.

Another theory as to the origin of the moral judgment is sometimes advanced by radical thinkers, who say that this judgment has its origin in the interests of the ruling class. The argument is based upon a certain philosophy of history. At any time the social order is under the dominance of a group or class of people who 'live by exploiting the masses.' This master class identifies its own supremacy with the social order itself. The particular social order of any historic epoch is the creation of some such class. In order to secure its dictatorship, the master class creates certain sanctities with which to bolster up its privileges, and give them the appearance of universal principle. Thus, there is created, in the interest of the rulers, an *idealogy*. This idealogy is accepted by the masses, and constitutes their moral ideas. It is merely a mechanism of control. Some actions are in accord

with the idealized interests of the master class, and some are not. Thus, men come to entertain the notion that there are two kinds of actions. They call those which are approved by the masters, good; and those which meet with their disapproval, bad. Hence, the moral judgment is said to rest upon the *class struggle*, and to be explained by the 'materialistic interpretation of history.'

The difficulty with this argument is that it is so easy for its advocates to *invent history*. Many historical facts are ignored; even their over-emphasis upon the class struggle would hardly justify them in this conclusion. Nietzsche likewise emphasized the rôle of the class struggle in the evolution of morals, but drew from it a very different conclusion. Instead of finding in it the basis of the *moral judgment*, as such, Nietzsche found in it rather the basis of the *criterion as to what is good*. The basis of the moral judgment he found to be the *self-idealization* of different kinds of men. He argued that from this self-idealization there have come at least *two moralities*: 'Master morality' and 'slave morality.' Originally, Nietzsche says, the difference between good and bad did not apply to actions, as such, but to the *difference of class*. The master class, being successful, glorified itself. Its members called themselves 'the good,' the best people, '*coi aristoi*,' the gentlemen, the nobles. From this idealization of themselves, there was derived a similar idealization of the manners and conduct characteristic of the master class. Thus we speak of 'gentle manners,' 'noble deeds,' etc.

Similarly, this class despised the cruder slave population which it ruled, and those words which characterize 'the bad' were originally attributed to the *slave population* itself rather than to their behaviour. Thus, we have such words as 'knave,' 'villain' – meaning the inhabitant of the little village on the estate – 'vulgus,' meaning common people; 'malus,' the Latin word for bad, coming from a word which means 'dark-skinned.' From the aristocrats' contempt for the lower classes, there is derived this contempt for the *behaviour* of

these classes. So we have such words as 'schlecht,' 'vulgar,' 'knavish,' 'villainous,' 'common,' all of which really mean *slavish*. Hence, Nietzsche holds that the moral judgment as to conduct is an abstraction derived from a *judgment concerning men*.

But as I said, such a derivation of the moral judgment means that there must be *more than one morality*. The slave class which admires itself, protects itself against its feeling of inferiority. Slaves also say, 'We are the good,' and by the word *good* they mean, the meek, the obedient, the faithful, the humble, the long suffering. From this self-idealization there come such virtues as 'meekness,' 'patience,' 'piety,' etc. As the masters despise the slaves, so the slaves fear and resent the masters. They wish them to be overthrown. They rationalize this wish by the conviction that *the masters are evil*. The evil man is simply the slaves' idea of the master class, and the behaviour of the master class seeking its own interests is evil. Hence evils according to this morality are 'exploitation,' 'self-aggrandisement,' 'haughtiness,' 'arrogance,' 'worldliness.' Nietzsche maintains that the *Christian ethic* is slave morality, and has its origin in slave psychology. Whether he is correct in this or not, is irrelevant for our discussion. My point is that the attempt to derive the moral judgment from the historic class struggle would lead us back to the derivation of the ethical judgment from the *æsthetic*. We have already dealt with this point.

Another theory as to the origin of the moral judgment is the doctrine of the *moral will*. This is a Kantian position, and is held by a number of leaders of Ethical Societies. The idea is, that the difference between the good and the bad is something which *exists independently* of ourselves. It is a distinction eternal in the cosmos itself, written in the skies like the law which keeps the stars from falling. *Duty* is eternal, because we live in a moral universe. Man is endowed with a moral nature. He has certain 'a priori intuitions' of duty and truth and right. Man is not the creator of the moral order of his

life, according to this theory; he merely recognizes such an order, and when his moral will is functioning properly, finds his greatest happiness in obeying the moral law.

This theory is, to my mind, unpsychological. Psychology knows nothing of such a 'moral will,' or 'a priori intuition' of duty. Duty does not exist as *duty in general*, but there is always some specific duty, inherent in a definite set of dilemmas, and these dilemmas are wholly within human experience. The moral universe is a pure piece of metaphysical speculation. So far as we can see, man himself has created the moral order of his life, and that order is definitely related to our biological needs and social relationships. If man had a moral will which gave him immediate knowledge of duty, it would be difficult to account for the honest differences in people concerning what is right.

This theory is one of the sources of the popular notion that there is a *one right way*, and that all who are not with us, are against us, and are of the Devil. This is an idea common in the rationalizations of crowds. It enables them to call their goods 'the good,' and to christen their rights 'righteousness.' It is a little presumptuous on our part, and is an evidence of human conceit, that we should imagine that our *simian* or monkey ways, right as they may be for ourselves, are the things which characterize the universe as a whole. The most psychological view of the origin of the moral judgment is that which takes into account the results in experience of human behaviour. Our actions do *make a difference* because they lead us to a better or worse state of affairs, and the moral judgment grows out of this fact. There is a right way and a wrong way of doing things. There is a right thing and a wrong thing to do. It is not necessary for us to resort to metaphysical speculation to find this out, because our actions have effects in experience which we cannot escape. We must adjust ourselves to our natural and social environment. Such adjustment, as a rule, is imperfect. But very gradually the race learns how to make it more and more

adequate. Much of our ethic is the result of the necessity of mutual adjustment among men.

From the very beginning, men have lived in *groups*. They are permanently in one another's environment. Each one is a part of the environment of all the rest. Now, it is impossible to adjust ourselves to an environment in which there is no regularity or order. Consequently, those groups which could reduce their behaviour to some kind of order had the best chance to survive in the struggle for existence. At the points in our behaviour, therefore, where we must take the behaviour of other people into account – that is, where our own behaviour becomes an environmental factor for some one else – *social necessity tends to reduce behaviour to habit.* It does not make much difference what the habits are, so long as the standardization of men's behaviour gives them a social environment which they can count on. If we could not predict the behaviour of our fellows, it would be impossible for us to live together. Hence, there is a persistent tendency through the ages on the part of men in groups to reduce the behaviour of one another to such forms as will be more or less predictable. So men say that some things are good and other things are bad or evil, because of the necessity of mutual adjustment, and because the effects of maladjustment are immediately known facts of experience. This is the psychologically correct account of the origin of a moral judgment.

§ 3

HOW CAN WE KNOW THAT WE ARE RIGHT?

We have tried to account for the existence of moral judgment. Now let us consider the question – it is really a difficult question – *How can we know that we are right?* Granting that we make the general distinction between acts that are good and acts that are not good, how can we know

when a particular act is good? This is a difficult problem always, and leads to all sorts of moral dilemmas. We most often act before we are quite sure what the results will be. Moreover, there are many possible ends among which we must make a choice. Most men wish to do what is right, to arrive at that which is the correct solution of the problems confronting them in view of the results in their own experiences. They also wish to do that which makes for social adjustment, that which will give them the approval of their fellows, and that which will bring them self-approval. Now these ends are often incompatible. And hence, the practical problem of morals.

As James says, considered a priori, the good is that which *satisfies a demand;* and if there were only one demand in the world, whatever that demand was, from the a priori point of view it ought to be satisfied. Why should it not be? The only reason is that there is some other demand, the satisfaction, or 'good,' of which is incompatible with the first. There must, therefore, be a drastic elimination of 'goods.' We are confined to the choice of the larger good or the lesser evil. That good which, in being realized, opposes the fewest other goods, and leaves the fewest other demands unsatisfied, must be the 'highest good' for us. But it is always a good *for us*. If we were organized differently, something else might be the good. *There is no absolute good* – Nothing which is merely good in and for itself; that is, which is not good for anybody in particular. What is good must *feel good for somebody somewhere*. Hence the need of a criterion.

A popular criterion is *consideration for others*. It is said quite truthfully that no man can live unto himself alone. Altruism has long been held to be of prime moral worth. He who thinks only of his own interest, is a 'bad man.' He who lives so that he brings happiness to his relatives, neighbours, and so far as possible to mankind as a whole, is a 'good man.' This is true. But we may properly raise the question whether *benevolence* alone may be taken as the moral criterion. There

is always the question as to how far one is justified in sacrificing himself for the good of others, how far his self-denial may go without merely increasing his selfish egoism. From this point of view, the *ends* of such self-sacrifice must also be considered. Should a Plato, for instance, risk his life in order to give a blood transfusion to a sick Alcibiades? If all who have property sold their goods and gave to the poor, would the poor in the end be better off? Or would universal poverty result? Since some degree of leisure and comfort seem to be necessary for the survival of culture, should culture be surrendered to benevolence? And as to benevolence itself, to what extent does it administer to the survival of the unfit, and hence to the multiplication of their kind, thus adding to the misery of the world?

Again, should genius strangle his inspiration because his truth might be painful and even harmful to some people? And there is a still further consideration. Are there not various ways of doing good to others, some wise, and some foolish and even socially harmful? Otherwise unscrupulous politicians may have warm hearts, so that even in politics they look out for the interests of their own party agents. Yet the social results of such benevolence may be baleful. Hard-hearted and small-souled moral reformers commonly believe that their bigoted and restrictive policies are for 'the good' of the people out of whose lives they would cast every joy.

Can we thus take the 'good of others' as our criterion? I am afraid not. Few men are wise enough to know what is good even for themselves, let alone others. Great as is the virtue of benevolence, it must always be aided by intelligence and good breeding, and even then it remains but one of the virtues. It cannot in itself be made the sole criterion of the good. The insistence upon the practice of 'Brotherly Love' *by* our neighbours is often an outgrowth of our egoistic desire to get something for nothing.

Kant thought that he found a criterion in the 'Categorical

Imperative.' 'Act as if the maxim of thy action were to become by thy will a universal law.' This sounds very simple, but it is anything but simple. Who knows what should be a universal law, or how a universal principle should be applied in a special case? What is right for me in some circumstances may be wrong in others, and what is right for you may be the wrong thing for me to do. We should talk not about 'right and wrong' in the abstract, but about the right and wrong thing to do. Why should I presume to make myself the moral legislator for the universe? Preoccupation with the universal diverts attention from the relevant and specific. In other words, Kant's ethic is an ethic which *deliberately ignores the results of behaviour*.

Kant would eliminate all that is empirical; that is, all that has to do with experience. He says, 'A good will is good not because of what it performs, not by its aptness for its attainment of some proposed end, but simply by virtue of the volition. That is, it is good in itself. Even if it should happen that owing to special disfavour of fortune, or the niggardly provision of a step-motherly nature, this will should wholly lack power to accomplish its purpose – then, like a jewel, it would still shine by its own light. Its usefulness or fruitfulness can neither add to nor take away anything from its value.' In other words, Kant says that if I act from a sense of duty, it does not make any difference what I do. Differences are empirical facts. Results have nothing to do with the case. I think this is a pernicious principle, because it leads men to think that they can be good without considering the effects of their actions.

Similar to this principle of Kant's, though more romantic, is the idea that *conscience is a true moral guide*; that all one has to do is to obey his conscience, and he will be good. There are times when man is justified in acting from motives of conscience alone. But that leads us to the question as to what we mean by conscience. Nietzsche showed that the 'good conscience' and the 'bad conscience' are largely social

products, dependent upon conformity to tradition. Dewey shows that this theory of conscience would make ethics purely *subjective*. Now all sorts of subjective, even unconscious motives, may go to make up our consciences. It is said that 'hell is paved with good intentions.' In conscience there is a great deal of rationalization. Our unconscious may always invent plausibilities which will make the thing we want to do seem right, whether it is or not. Crowds and neurotics are always rationalizing their behaviour in this way. If a mob wishes to torture a negro with a good conscience, it need only rationalize its sadism, so that it takes on an appearance of 'Devotion to morality.' An illustration of such rationalization of the conscience appears in this morning's paper. A 'boot-legger' has become so wealthy and prosperous that along with his prosperity has come the desire for family respectability. His daughter is ashamed because her companions make slighting remarks about the source of the family fortune. The father's heart is touched; his 'conscience' troubles him; so he consults the United States District Attorney to learn if charges pending against him will prevent his departure for Europe. He says, 'Rosie and I are going home. With the roll I got, she can be a real princess there, and hold up her head with the best of them.'

I am convinced that if you would consult the inhabitants of any prison, you would find that nearly every one of them had a good conscience. We simply cannot accept the fact of our moral inferiority, so we always invent what in a previous chapter I called 'fictions about ourselves.' It is not that 'conscience makes cowards of us all,' but rather that *cowardice makes us conscientious*. Conscience may be more clever than true. It is very often a special pleader, less often an impartial judge.

It is often said that the best criterion of the good is that which is given by *divine revelation*. In other words, there is a common belief that morality is based upon religion. Without doubt, religious institutions, being largely also political

institutions, have lent sanctity to moral custom and have given the support of religious authority to various folkways. But psychologically considered, in spite of most people's belief to the contrary, I cannot see that religion and morals have very much in common. Religion, as I have defined it elsewhere, is our symbolic appreciation of the mystery of existence in the interest of our ego. *Religion is an escape mechanism*, a poetic approach to the world to which it gives a character that is conducive to the achievement of human ends. The function of religion is to make us feel at home in the universe, and to keep up our self-appreciation. In other words, religion is redemption, as I have said. Ethics grows out of the need for mutual adjustment in the very world of reality, the significance of which religion would transform.

To be sure, religions all have their moral codes, the commandments. But these commandments are really of *human origin*. Take, for instance, the Decalogue. Much of the Mosaic legislation of which it is a part is said to be derived from the code of Hammurabi, who lived a thousand years before Moses. Moreover, each of the ten commandments is such an obvious rule of action, that it does not require a 'divine revelation' for humanity to know these simple moral laws. As moral guides, there are many things in the Old Testament which would be poor rules of practice to-day. Polygamy, slavery, and war are all there with moral approval. In the book of Exodus, the Israelites are told to borrow jewellery from their Egyptian neighbours, and then to run off to the wilderness without returning it. In another place, they are told that if their oxen die of a disease, they must not eat the meat, but should sell it to foreigners. David, 'the man after God's own heart,' would hardly be considered morally respectable in Puritanical America.

The New Testament presents something of a moral problem to the psychologist. Its highest commandment is the 'Golden Rule.' Yet here again, no revelation seems to be necessary to teach a man that he must treat his neighbours in

the way he would have them treat him. You may generally count on the neighbours teaching him that. In the New Testament there are really *three moral systems* and they are hardly compatible. There is first, an *aristocratic* ethic. The Christian has held before him the ideal of independence, of being above the law. He is to be magnanimous, yet not to cast his pearls before swine. On the whole, he is taught to be tolerant, 'perfect' in the way that the Heavenly Father is perfect; not to judge men, but to be like the Father, who sends his sunshine and rain on the evil and the good, the just and unjust, alike. This ethical idea was also held, with some modification, by many aristocratic moral philosophers before Christianity.

There is, second, an *ascetic* morality in the New Testament. Here spirit and flesh are enemies. Voluntary abstinence is ordained. One must die unto this world, crucify the flesh, present his body a living sacrifice, in order that he may attain 'purity.' I have not the space in this chapter to give a psychological discussion of the idea of purity in ascetic morality, but it is enough to say that it has certain affinities with the pathological withdrawal of interest from the world of objects, and the *ceremonialism* characteristic of it has striking likenesses with the ceremonialisms which one suffering with compulsion neurosis uses to purge himself of an inner feeling of guilt.

The third moral system in the Christian ethic is, psychologically speaking, *plebeian*. It is revolutionary, intolerant, coercive and revengeful of a social order in which the masses are made to play an inferior rôle, and is very contemptuous toward the great of this earth. Each of these moral systems stands for a definite psychological approach to life, and I doubt if anyone could successfully carry out the precepts of all of them.

In general, it may be said of religious ethic that it is ritualistic and ceremonial. It is based upon *commandments*, not upon the consideration of results. Conduct here is 'required'

of man by something *outside the situation* in which he has to behave. He has to keep the commandments, and trust the Lord for what happens. Here, as in the case of the Categorical Imperative, a criterion is set up which *ignores the results of behaviour*. Man is led to feel that he is doing the right thing, when he is performing the ceremonially correct act, an act which may be *wholly irrelevant* to the ends of successful adaptation to environment.

The criterion must be relevant to the situation at hand. The good must be something which has to do with the case. There must be a sense of the connection between an act and its end. In other words, we cannot escape the fact that good behaviour, as Dewey says, is intelligent action. *Intelligence itself is our best guide to conduct.* Dewey defines intelligence as the purposive intervention in the course of events together with foresight of ends. Intelligent behaviour necessitates choice. It necessitates the consideration of all the probable and relevant aspects of the situation in which action must occur. Morality has as much to do with the environment as with the will. As Dewey says, it is like breathing, which is as much a function of the air as of the lungs. Any ethical philosophy which considers the 'moral will' alone, is as foolish as would be a hygiene which considered the lungs as if they had nothing to do with the atmosphere.

We must get rid of the notion that there is about ethics something sacerdotal or metaphysical. Morality must not become a sequestered interest. It is simply the difference between adequate and inadequate reaction to situations. There is nothing more sacred about it than there is about laying bricks or brushing one's teeth. In fact, every possible action has moral significance when we consider the act in the light of its results upon ourselves and others. The most moral actions are those in which the whole situation is taken into account, and in which there is some appreciation of the values of experience.

There are certain values of civilization which must be kept

alive. And when all is said and done, the moral life is still something of an adventure, involving risks and demanding thought. We cannot make it dependent upon outside and irrelevant considerations. The moral order of the world is man's achievement, probably his noblest and highest. Man is at his best, when he comes to understand himself as a creator of value, and an author of the moral criteria, by which his life must be guided to ultimate success or failure, a success or failure which may involve both himself and his world.

CHAPTER SEVENTEEN

BEHAVIOURISM – THE LATEST AND MOST DEBATED DEVELOPMENT

§ 1

'Behaviourism' is a new word. It stands for a point of view which was bound, sooner or later, to influence psychology. The behaviourist school differs from other schools of psychology in this: that it attempts to study what we call mental life by the same purely objective methods that are used in such natural sciences as chemistry and biology. To the behaviourists, psychologists of other schools are not really scientific, because they regard mental facts as phenomena which belong to an order of being *wholly different* from that which we find in the objective world. Now it is a presupposition of science that 'nature makes no jumps.' The scientist is interested in pointing out the causal connections among the facts of nature. He believes that there is a certain uniformity in the universe, so that the same scientific logic which applies to one group of facts will apply to others; in other words, science maintains that the universe in all its phases is reducible to certain scientific formulas and laws.

We have seen in the previous chapters that there is a connection between what we call mental life and what we call physical life. We have seen that higher types of mental life accompany more advanced stages of organic evolution. Are the so-called facts of mind so different from the rest of nature that they cannot be studied or explained in the same way as other facts? Much traditional psychology says that they are. The assumption that they cannot be so explained irritates many men trained in natural science. These scholars would like to see the same degree of accuracy, the same objectivity here as elsewhere. They look forward to the achievement of a co-ordinated series of sciences. They would explain the facts of biology and psychology in the terms of the sciences of chemistry and physics.

There are, of course, many difficulties in the assumption

that mind and body belong to two separate 'realms of being' and are essentially different. Consequently, behaviourists have the feeling that these difficulties may be avoided, and the problems of mental life very much simplified, if they can proceed on the assumption that mind is simply behaviour, and that its phenomena may be explained as the response of the organism to some physiological stimulus.

Naturally, such an assumption has created controversy. There has probably been much more controversy than was necessary. It would have been easier to judge behaviourism on its merits, if psychologists did not still retain the habit of the older philosophers of dividing themselves into 'schools,' and if people could only keep out of the discussion of it things which have nothing to do with the case – metaphysical, religious or sociological interests. Behaviourism, therefore, has come to be something which people feel they must be 'for' or 'against.' Many persons regard it as a sort of creed: one may become converted to it or withhold belief. To some it seems like a sort of gospel. Many social radicals have accepted it uncritically, often without really knowing what it means, merely because behaviourism seems to them to stand for materialism, and materialism means 'the materialist interpretation of history,' and that means Marxian socialism. I am quite sure that the leading behaviourists are far from this point of view. To yet other people, behaviourism appears to be a malicious attempt to destroy the spiritual meaning of life.

Now all this is certainly unscientific. We have reached a time in our intellectual development when we ought to be able to judge a movement like behaviourism on its merits, and to view it as a method of study to be verified by appeal to fact, and not take it up as if it were some special cult. In just the degree that people are cultists, they have not attained the scientific spirit. As psychology has become more popularized, this tendency to make a cult of its various schools has been greatly increased. There are people who are ever

prone to make a fad of the latest idea, and there are many others who resist violently any attempt to compel them to take an objective view of the facts of nature. We must remember that men once resorted to introspection and revelation in order to explain the shape and size of the earth, the movement of the stars, the origin of species, and the laws of chemical change.

In and of itself there is nothing very startling in the attempt of the behaviourist to study human psychology in a strictly objective manner. Behaviourism is primarily a method of study, and it is to be valued only after we have properly appreciated its results. I do not, however, mean to minimize its importance. As we shall see, it gives us a fresh and stimulating point of view, and if it is able to add anything in the way of accuracy to our knowledge of psychology, we ought to be glad. Certainly it has greatly increased the discussion of psychological problems among scholars, and this in itself is a good thing. Behaviourism may be regarded along with psycho-analysis as one of the two important developments in psychology since the days of James. G. Stanley Hall seems to regard it as a protest against the older introspectionists' method, a protest which is, to some extent, justified.

Personally I do not see why there should be an intense quarrel as to what is the one right method. There are some psychological problems which can best be solved by the behaviourist. There are others for the solution of which we still have no other methods than the introspectionist, and undoubtedly there are many problems to which psychopathology gives us the best answer. If there are inconsistencies in psychology to-day, perhaps wiser and less dogmatic men than ourselves in the future may find ways to harmonize them. Again, perhaps there will always be inconsistencies. It is something of an article of faith, even among scientists, to hold that the world in which we live can be reduced to a logically consistent set of principles. This is a good faith,

but scientists should be on their guard against the assertion that they have achieved their goal as yet. And this applies to behaviourism.

Some day the behaviourist method may give us an answer to all the problems of psychology, but at the present time it has certainly not done so, for it leaves out many things which are of great psychological interest. I am not going to pass judgment on behaviourism, or on the splendid work which has been done by its leading exponent, Dr. John B. Watson. It is rather my purpose to state clearly just what the behaviourist standpoint is. As I said, behaviourism is an attempt to study psychology with the same exactness of control and carefulness of observation, and the same objectivity (and with similar laboratory methods) that have given us our present knowledge of physics and physiology. To this end it abandons entirely the introspective method. It is very critical of introspectionism. In the first chapter we saw that this method has serious limitations. Students in psychological laboratories may work for years striving to discover minute differences of sensation, analysing their own thoughts and emotions, and yet never attain any such body of knowledge as would be agreed upon by other students studying the same data in their own experience.

The criticism has been made with some justice that purely subjective material can never be made into a scientific body of knowledge. Always our subjective states, while they may be immediately known to us, are susceptible to the interpretations which we incline to give to them. There are people who have subjective certainty of the immortality of the soul, or other religious doctrines. Recently a clergyman won a debate in Carnegie Hall, New York, with such subjective arguments. The subject of discussion was a purely historical problem having to do with the historical origins of Christianity – in other words, with historical events which happened nearly 2,000 years ago. The argument brought forth in support of the historicity of the Christian tradition

was that the clergyman 'knew in his own heart' that this tradition is true. Now it is obvious that if we could know historical or metaphysical matters in this intuitive manner, scholarship and historical research would be wholly unnecessary.

Now behaviourism would avoid such errors as those of introspectionism, simply by abandoning introspectionism, along with all the phenomena that are commonly studied by this method. It has no use for the alleged subjective facts of mental life. It is not concerned at all with anything that goes on inside of us, except, of course, those physiological processes which can be studied in laboratories. Mental life thus becomes a phenomenon of the objective world, and its facts and laws are studied, not by a student observing his own feelings, but by an *outside observer* using the methods of careful measurement, blood analysis, and controlled experimentation. In other words, as I indicated in the first chapter, behaviourism adapts to the study of human reactions the identical methods used in the study of animal psychology. As the animal cannot talk, the psychologist is not concerned with what it thinks or feels; he is concerned with *what it does*, when stimulated in various ways.

In recent years animal psychology and physiology have, by thus working with animals, made a great advance over the mixture of common sense and guesswork which characterized them a generation ago. So in the study of human psychology, the behaviourist warns the student that he must confine himself strictly to those facts which can be stated in terms of 'stimulus and response.' The assumption is that the organism is by nature endowed with characteristic modes of response, the result of its inherited physical organization. These responses are purely mechanical movements of the organs of the body. They take place regularly, and in a characteristic manner when the appropriate stimulus is given. The stimulus, too, is a fact of the material world. So the behaviourist believes that psychology is not a science of

an invisible and mysterious entity known as 'Mind,' but is as purely a study of movements of particles of matter and the causal relations of such movements, as is the science of electrical engineering.

The aim of psychology, then, becomes essentially practical. It is to 'predict and control' human behaviour. Human behaviour can be controlled in the following manner. The original reflexes may be 'conditioned'; that is, a stimulus which ordinarily sends impulses to a certain organ, or reaction pattern, may be made to result in another and quite different mode of response. For instance, a person may be put in a laboratory, and an electrical apparatus so arranged that whenever he sees certain differences in colour, he may be given a shock which will cause an automatic jerk of the muscles of his arm. After this process has been continued for some time, the shock may be discontinued, and the arm will give the spasmodic movement when the differences in colour are observed. This process is purely automatic, and may be used in determining a subject's sensitiveness to differences in colour, or any other difference. The 'conditioned reflex' is particularly important, because it is said that all learning and habit formation consist in the conditioning of original modes of response in one way or another.

§ 2

BEHAVIOURISM AS AGAINST INTROSPECTIONISM

In order to gain a more detailed knowledge of this subject, I wish to discuss the writings of Dr. John B. Watson, the leading exponent of Behaviourism. I do not think that I have any prejudice in the matter. I have great respect for Dr. Watson, but it may be that my training has been such that I do not quite understand him.

Let us now note the difference in point of view between Dr. Watson's work, and the *Psychology* of Professor Burtis

Burr Breese, of the University of Cincinnati. Breese defines psychology as 'that study whose task it is to point out and organize the observable facts of conscious life, and to formulate theories and hypotheses necessary to explain these facts.' He says that modern psychology differs from the older in that it concerns itself more with the facts and less with the nature of consciousness. But psychology is still the *science of consciousness or of mind.* It is radically different from the other sciences. The fundamental method of psychology is the observation of 'the mental states and processes taking place in our *own* minds, and secondly, the observation of the behaviour of others by means of which we may infer the presence and nature of their mental states.'

Now note the difference when we turn to Dr. Watson's book. There is not a word in it about consciousness, or feeling, or selfhood, or imagination, or attention, or any of those things with which psychology has been occupied during most of its history. We are told that psychology is the science of behaviour. 'It attempts to formulate, through systematic observation and experimentation, the laws and principles which underlie man's reactions.' Psychology is primarily busy with the matter of adjustment to environment. In every act of adjustment there is a stimulus and a response. 'The goal of psychological study is the ascertaining of such data and laws that, given the stimulus, psychology can determine what the response will be. Or, on the other hand, given response, it can specify the nature of the effective stimulus.'

The responses may be divided into two kinds: *hereditary* modes of response, and *acquired* modes of response. Each of these may be divided into *implicit* or *explicit bodily movements*. The implicit movements are the subtle ones which take place within the body itself, in the muscles and glands, etc. The explicit movements are those which we ordinarily notice in overt bodily activity. But the implicit and explicit responses are alike purely organic and physiological. The *implicit hereditary* responses include the whole system of

activities or secretions of the ductless glands, located in various parts of the body; also changes in the circulation of the blood and muscular responses in the 'unstriped' muscle tissue. *Explicit hereditary* responses include the observable instinctive and emotional reactions, such as we see in sneezing, blinking, dodging, fear, rage and love. Acquired modes of response are, of course, habits. They consist of conditioned reflexes. The *explicit habit* responses are actions like unlocking the door, playing tennis, talking; in fact, most things we learn to do. *Implicit bodily habits* are, first of all, sub-vocal talking or 'thinking'; secondly, the system of conditioned reflexes in the various glands and unstriped muscular mechanisms.

Before saying a word about each of these divisions of this subject, it is well to notice that Watson, like other contemporary psychologists, gives an account of the physical basis of mental life, although he would never use these terms. He speaks of 'receptors and their stimuli.' He gives an excellent physiological account of the structure of the nervous system, the nature of the neurons, and the anatomy and physiology of what other psychologists would call the sense organs. To Watson, however, the eye and the ear are not 'sense organs.' They are mechanical contrivances, the function of which is to pick up a stimulus from the environment and start it on its way as a nerve impulse to an appropriate 'organ of response.' These organs of response are also studied in some detail, especially the physiology of muscle fibres and the endocrine glands. Emphasis is laid upon the function of such glands in those responses of the body which other psychologists call 'emotion.'

With the hereditary modes of response, behaviourism has probably done its best work, though much remains yet to be done. Watson's method of studying *instinct* is illuminating. Instinct is defined as the hereditary mode of response of the pattern reaction type. In order to understand instinct in human beings, therefore, it is necessary to study an individual

from the hour of his birth to maturity, to know just when and under what conditions these hereditary reaction patterns appear. However, as most of the patterns become modified by habit very early in life, the most important age for the study of instincts is infancy.

Watson's study of babies is famous in psychology. It is too extended for us to enter into discussion of it. A few facts, however, may be singled out. For instance, there is the grasping reflex which infants lose after the first few days of life. It was found that most babies can support their full weight for a longer or shorter period of time, hanging by either hand. This instinct we have perhaps inherited from our arboreal ancestors. The crawling instinct appears somewhere about the 90th to 115th day. Various positive and negative reaction tendencies of children have been studied. These have much to do with emotion. The *fear response* seems to be stimulated by fewer objects than most people imagine. Many of our alleged instinctive fears are not instinctive at all, but are *conditioned*. Large numbers of children were experimented with; they were shown various animals – bats and mice and snakes – and even took them in their hands, without displaying any original tendencies to shrink from these creatures. The fear response in small children is commonly excited by loud noises, or by the sudden removal of support from underneath so that the child falls a short distance. *Rage* is commonly stimulated by restricting the movements of the child's arms and legs. The original response of the emotion of *love* may be produced by stroking the child's body. Hence it is held that the erotic instinct, instead of appearing on maturity, as many think it does, is an original mode of response.

The method Watson has used in studying these modes of response has been of great value in clearing up much of the confusion about instinct and emotion. There has been much guess-work and unsatisfactory writing on this subject, and very little systematic observation. The list of instincts in man

is much shorter, according to Dr. Watson, than according to psychologists like McDougall and James. The method of studying emotion by observing the non-adaptive and random movements of various bodily organs, also of carefully noting the effects of the secretion of the thyroid and suprarenal glands – notably, the amount of sugar discharged into the blood – has, in some instances, enabled the psychologists to find a definite physiological basis for *measuring the emotions*.

Perhaps the most revolutionizing theory Watson holds is the theory that *thinking is sub-vocal talking*. As we learn to give names to the objects about us, we may juggle these words in our implicit responses in such ways that new patterns are formed. In other words, the implicit modes of response that go on in the 'laryngeal processes' have the function of directing the movements of the entire organism. These implicit language habits come to issue finally in overt action. There is nothing at all mysterious about thinking, therefore. It is not an 'intra-cerebral' function. 'Could we bring thinking out for observation as readily as we can tennis playing or rowing, the need for "explaining" it would disappear.' It would be seen that thinking consists merely of conditioned bodily reflexes like any other form of muscular activity.

Of course, this view is an hypothesis. I do not believe that Watson or any other behaviourist would maintain that it is verified. I do not see just how it could be verified by experiment, and there are many facts which seem to controvert it. Much thinking, of course, takes place in words, but to deny that there are any *images* seems to me to be going pretty far. I wonder if the mechanical inventor may not on occasion see in imagination the contrivance which he proposes to create. There is such thinking as goes on in higher mathematics, where the *implications* are not even stateable in verbal terminology. I wonder just how, on this basis, the behaviourist would deal with certain *logical relationships* and *judgments*. For instance, what constitutes the proof of a pro-

position? All these and other difficulties have been raised against this behaviourist account of thinking. In my chapter on 'How We Think,' the point is made that thinking contains, at least sometimes, a 'consideration of ends' which the behaviourist theory seems to ignore. However, behaviourism has here set before students of psychology an interesting problem and a new challenge, and we may expect a good deal of research on this subject in the next few years. The theory is at any rate ingenious, even though it is doubtless inspired, in part, by the behaviourist's attempt to be consistent, and hence to explain behaviour while leaving out consciousness.

As to whether the behaviourist really means that there is no such thing as consciousness, I doubt if the representatives of this school are themselves clear.

In an early paper Dr. Watson implies that the traditional psychology is somewhat to blame for the confusion regarding the subject, which to my mind exists even in the behaviourist school. Psychologists have sometimes spoken of consciousness as if it were a *thing apart*, the word to be spelled with a capital C. Consciousness, from this view, is a non-material, invisible, spiritual entity, belonging to the world of 'spirit' rather than that of matter. Of course, from this point of view, the discussion of consciousness properly belongs to metaphysics rather than to science, and the behaviourist is quite justified in keeping his discussion within the realm of psychology. He may, therefore, with perfect propriety say that there may be such a mysterious entity, just as James argues that there may be such a thing as the soul. But granting its existence, he may correctly say that science as science is not interested in it.

On the other hand, psychologists sometimes speak of consciousness as an element in, or a quality of, certain facts of behaviour; that is, certain nerve processes *may become conscious*. This is not to say that psychology is merely the science of consciousness. But it is to say that common sense and universal experience evidently support the view that some of

our actions have this quality. As a quality in the response of the organism to its stimulus, it would seem that this quality should be studied along with the other qualities in that response, and that to ignore it is seriously to limit the scope of psychology. But behaviourists do not merely say that though consciousness in this latter sense exists, they are not interested in it. Many of their statements go farther and indicate frequently a flat denial of the *existence* of consciousness at all. In other words, behaviourism has a tendency to form an alliance with mechanistic metaphysics. That is, it assumes what in another chapter I call the 'automaton theory.'

Reduced to its logical conclusion, this theory means that physical and chemical reactions are the only reactions there are in nature, and that the so-called psychological reactions to stimuli, in spite of the appearances to the contrary, are really determined in some such manner as purely inorganic changes are determined. What those who hold this theory seem to forget is that even in the study of the inorganic world, scientific ideas are really symbols, figures of speech, human devices, selected and often artificial likenesses among objects, *all from the human point of view*. In other words, scientific ideas are *instruments* devised by man, the value of which is the practical hold they give us upon the environment in which we live. Even the most theoretical propositions of science have in the end this utilitarian function. They are teleological. Without the fact that we are, as human beings, 'interested spectators' of nature, seeing it from our own point of view, scientific principles become impossible. Hence, it is an assumption of faith on the part of scientists to say that all the phenomena of the universe may be expressed in terms of scientific logic, for science has by no means as yet achieved its goal. The very idea that our human and partial reasoning may give us a picture of the universe as a whole and its general laws, is a rationalistic assumption; in fact, a metaphysical dogma.

Behaviourism, then, may be either one of two things. First, a method of study. Second, a theory as to the ultimate constitution of mind. These two are often confused in the writings of behaviour psychologists. The latter, the mechanistic metaphysical theory, we shall have to dismiss because its assumptions lie beyond the radius of psychology. The former, that is, behaviourism as a *method*, is something to which there can be no scientific objection. As a method, behaviourism has many advantages over the others. It has the advantages of simplicity, accuracy, and objectivity. Also, it has the advantage of integrating the psychological method with that employed in the other sciences, and hence of being more consistent with the whole body of scientific knowledge. As I have suggested, behaviourism has one disadvantage when it is proposed as the *only method*. There are many problems of psychological interest which it dismisses altogether too lightly, many problems of importance to the social psychologist, for instance, which so far as I can see, it does not help us to solve. Watson says that the aim of psychology is to predict and to control. But is that all? Does this simply mean that psychology is to give us a device for manipulating people? Has it nothing to say about the *value of the ends* toward which such methods of control are made?

What we need is a psychological criterion of popular ethical ideas, of the various tendencies in democracy, of propaganda, of public opinion, and crowd behaviour. It is necessary for the student of social psychology to learn the true motives of many popular movements, and often these motives are very different from the professed ones. It is only by analysing the fictions and wish-fancies that motivate people in this respect, that we can ever find such a criterion.

It is altogether too general to say that certain forms of social behaviour are acquired forms or habits, and others are inherited modes of response. We wish to know just how these acquired habits are related to the social behaviour patterns of

people; how they grow out of an individual's past, and what is their unconscious meaning. There has been too much honest work done in psychopathology during the last generation to have the whole achievement of Freud and his followers dismissed with a wave of the hand.

Are not Watson's very words, 'predict' and 'control,' self-contradictory? The word 'predict' is the outgrowth of the mechanistic or deterministic point of view, and its implication is that given certain situations, only such and such responses may be expected. Hence, there are no alternatives, if we only knew the whole story of the causes of an individual's behaviour. But now in this case, the word 'control' becomes somewhat irrelevant. Why should we seek to control some one's behaviour, except that we *prefer* to have him do one thing rather than another? Even though it could be shown, which as yet it has not been, that given a certain situation there is only one response possible, – so that the individual whom we are manipulating has no choice in the matter: yet does not our attempt to control him mean that the *controller has some choice?* Hence, choice and selection are really presupposed.

Again, behaviourism, valuable as it is so far as it goes, gives too simple an account of the more complicated forms of behaviour. Dr. Watson says that in order to be able to predict accurately the behaviour of an individual it is necessary that we *know his whole past*, since he has been in the process of having his reflexes conditioned and reconditioned from the beginning. But how specifically are we to know the details of that past by the strict use of the behaviour method? Many experiences in the individual's past have been forgotten, and may only be restored to memory by the method of the psycho-analytical procedure.

Moreover, the behaviourist account of personality, to my mind, is a surface view as compared with that of the best work which has been done by psychopathologists, or even by some of the introspectionists, – if James is to be included

among the latter. It will be borne in mind that by the methods of psychopathology, some of the deepest underlying determinants of behaviour may be brought to light. Infantile experiences and tendencies, the influence of the parents, and the child's secret affections, fixations and resentments, his growing thought about himself, the images in which he has in years past pictured his own future, the struggles that accompanied his psycho-sexual development, with the many shynesses, attractions, and repulsions, together with thousands of curious defence mechanisms and imaginary escapes from reality, have contributed to make the individual what he is to-day. The reading of the case report of a careful psycho-analysis is like the reading of an elaborate account of a suppressed biography, containing the very things which are never brought to light by any other method. Even as such, an analysis does not, by any means, give to the investigator an adequate account of an individual's past. To know an individual's past one must have *lived through that past himself;* in other words, one must *be* that individual. Of course, there may be much very shrewd guesswork on the part of an investigator; but certainly from the behaviourist point of view, the indulgence of such guesswork is particularly in conflict with the rigid requirements which behaviourism sets up for scientific psychology.

§ 3

BEHAVIOURISM AND PERSONALITY

Note the simplicity of Dr. Watson's suggestions for the study of 'personality.' Space here is too brief to give anything like an adequate account of his criteria. First, there is a suggestion of the intelligence tests of the Binet type and others. But in cases where the individual is too 'complex' to be rated in this way, other tests are suggested to show the range of information, learning ability, retentiveness and the

accuracy of his observations under simple conditions. But it has already been demonstrated by many psychopathologists that in all these responses, the individual's functions may be impaired by an unconscious emotional complex. For instance, in the word-association tests of Jung, it has been shown that where such a complex is touched by a test word, the 'reaction time' is uniformly lengthened.

Again, Dr. Watson suggests a general survey of the instinctive and emotional equipment and attitude, and the number and variety of the individual's 'drives' to activity. Does one display a normal amount of curiosity; has he a 'knack of doing things with his hands'; what particular bents and hobbies has he; what is the history of his early sex enlightenments, sex attachments, and so on? This last is a problem which can never be answered except by the method of psycho-analysis. Again, are the individual's emotional reactions well balanced? This suggestion is altogether too general.

In the study of a person's general habits of work, the following questions are suggested for consideration: Is he punctual? Does he give up easily? Does he work to his limit? Is he adverse to having extra duties put upon him? Does he work by rule of thumb? Is he fixed upon his present level of attainment or is he making progress? Each one of these questions suggests a hundred others that should be asked. Certainly, in all these particulars, circumstances alter cases, not only circumstances of the present environment, but circumstances which may have affected the individual in early childhood, and have been long forgotten.

Again, the *activity level* is taken as an important element in personality. Is the individual lazy or industrious? Is he talkative? Is he given to frequent laughter and loud conversation? Are his movements in good form or is he awkward? And so forth. Again, social adaptability is taken into account. How many intimate friends has the individual? What is the history of his family relationships? How easily does he get

acquainted with people? How loyal is he? How tactful? Is his society sought by others? Here also, we seem to be dealing with the widest generalizations. Any one of these particulars may be the result of influences operating throughout an entire life history, and to ignore such influences would be to take merely a 'snap judgment.' The same is true of the questions suggested to determine capacity in recreation and sports; or organized sex-life, or reaction to conventional standards. Whether one is boastful in conquests, or prudish and easily shocked, trustworthy in money matters, or a flirt, a lover of music, over-meticulous or foppish, all depends very much on how the investigator defines these terms. Surely for adequate study of personality something more specific, something that will give intimate *insight into the causes of behaviour*, and some knowledge of the integration of a whole personality, is needed.

The behaviourist view of personality is a curiously mechanistic one. We are told that personality is merely the organism at work. Those who regard personality in any other way are said to be 'superstitious people,' who either have a romantic view of persons or are the victims of erroneous religious considerations. Personality as a whole is compared to a gas engine. The way in which a gas engine works is its 'personality,' and that is all there is to it. When the separate parts work together efficiently so that the engine runs smoothly, its personality is well integrated; when not, it shows that the engine has a 'personality disturbance' of some kind.

The behaviourist attempt to give an account of personality means that he has to resort to what I want to call an additive process. Having first in his laboratory separated behaviour into a number of specific reflexes, inherited or conditioned, the behaviourist, in the end, seeks to reintegrate his subject by the simple process of putting his 'Humpty-Dumpty together again.' Now, of course, a unity so achieved must necessarily be artificial, and of the *inorganic* type. The gas

engine has truly an inorganic unity. One builds a gas engine by assembling parts, which in the state of nature may have been widely distributed in space. But the unity so achieved is merely that of a balance of forces. The unity of an *organism* is different. A tree begins its life as a single cell and grows out from that simple centre. Its unity is central and given. However great the ramifications of its roots and branches and leaves may be, there runs through it all, as a living organism, a unity which is very different from that of a machine. The structure of a machine is achieved from *without in;* that of an organism from *within out.* No strictly mechanistic theory of organic functioning seems to me to take this fact adequately into account.

In conclusion, behaviourism is, properly speaking, not a theory of the nature of mind. It is a method of study, an application of the scientific technique of animal psychology to human behaviour. Such a method naturally limits the scope of psychology, but it does so in the interest of clearness and of scientific accuracy. Unless the assertion is made that no other method is permissible, such a limitation is quite justifiable, even though it leaves many important questions unanswered. On the whole, the behaviourist should be given every opportunity to pursue this method as far as it can be pursued. The behaviourist's assertion that all behaviour may be explained in his terms should not arouse opposition. It is merely his way of expressing the *hope* that he may some day be successful in advancing scientific knowledge. Should he ever succeed in reaching his goal, there can be no quarrel with his success, for it will then have been established as scientific truth. Certainly there should be no opposition to this method on the ground that we dislike to have the explanation of our mental life so simplified. Naturally, each of us considers himself unique, and resents the attempt to account for his personal experience in the universal formulas of science. Certainly much of the opposition to behaviourism is based on ground which is wholly irrelevant. Often it is the

result of a general opposition to the accumulation of the body of accurate scientific knowledge. But in so far as the behaviourist succeeds in adding to that body of knowledge, he is on the right course.

CHAPTER EIGHTEEN

HOW MUCH PROGRESS CAN HUMAN NATURE STAND?

§ 1

A STUDY of social psychology should include the discussion of a mental fact which not only is of great importance in the thinking of our age, but is, in a way, characteristic of it. *What is the psychological meaning of our modern faith in progress?* This faith does not seem to have characterized the thought of earlier ages in the way that it does our own. It is essentially a modern and Western belief. The distinguished English scholar, Mr. Bertrand Russell, says of the Chinese that they have no interest in progress; in fact, when you speak to them about it, they do not know what you mean; they are satisfied to keep things as they are. From the literature of the Ancients I do not find that the idea of progress played any great part in their civilization. Greece in the Periclean age made great progress, but the Athenians do not seem to have had the concept of progress as such. Medieval Christianity was essentially conservative. Its aim was to preserve, without corruption from human sources, sacred tradition and institutions. Change was not welcome, though, of course, it did occur. Even the men who participated in the Protestant Reformation did not regard their movement as a 'progressive' one. They did not speak as some of our present-day progressives speak, saying that, in a changing world, religion also must change. They regarded their movement as a return to pure primitive Christianity. This was the ideal which they sought to achieve. It was an ideal which belonged to the past; not to the future.

A step in human advance as great, perhaps, as any we have had in history was made by the Humanists of the Renaissance; yet these men felt rather that they were reviving the values of a civilization that had long been dead. They were concerned with the writings of the ancients, and the very movement in which they participated was called the Renais-

sance, 'rebirth'; that is, the revival of ancient culture. Thus it has been the thought of most men down to modern times that the 'golden age' lay in the past; that the ancients possessed a wisdom which subsequent generations must preserve; that the fathers were wiser than the sons. Hence, tradition and authority have held sway. Men have felt that their greatest service to civilization was to preserve from decline that which had once been delivered to man.

The idea of progress seems to have taken hold of the minds of men about the time of the transfer of power from the classes to the masses. It is, in a sense, a democratic belief. The golden age is transferred from the past to the future. The future takes on utopian colours, and men begin to feel that with the passing of time they are walking toward the light. A new optimism of the masses has thus come to earth. Change is welcome, and change is held to be good in itself. The flow of time which to many wise men of the past was that which ate up all things, is held by moderns to be that which brings all things. 'Every day and in every way' everybody is 'getting better and better.' The hard lot of man on earth is only a temporary condition. The future of humanity is bright. It is assured. The present is better than anything that has ever been before, and up-to-dateness becomes a standard of value.

Progress is to be shared by all. It is like the gospel of grace: 'Whosoever will may come.' One need only believe in progress, work for progress, to possess The Good. The philosophers praise progress; men live for it; evolution seems to prove it; few doubt it, or ask whether it is all good. It was, during the last century, held to be enough that we were all progressing toward that 'far-off divine event' toward which the whole creation moves. Progress is a new Law and a new Gospel. It is a cosmic fact which, working through the forces of society, gives to the world a meaning of its own, and is in itself enough to justify existence.

In America this faith in progress is, to a great extent

apparently, a deduction from fact. Americans are of the new world; their country is still young, its resources are vast and promising, and their development and exploitation has been rapid indeed. Millions there have gained a new start in life, a new self-reliance, for America has emancipated many men from the slavery of the old world. The country has grown rapidly. New fields annually blossom in what was hitherto desert and forest. Cities have grown to be metropolitan centres in the lifetime of a single generation. In most modern civilizations new mechanical inventions, each more wonderful than the last, have fascinated the imagination of men, and have transformed their ways of life. The productivity of labour has been increased. New comforts have been added to living, and with each step of advance, there have come new and unexpected demands and satisfactions and achievements. Living has become something of an adventure. Scientific knowledge of the world has come with startling rapidity. Education and the franchise have been extended until they have become wellnigh universal. Organization has grown; the functions of government have been extended; so that we find our whole way of life radically different from that of one hundred years ago.

Who then can doubt progress? I do not. In raising this question of how much progress human nature can bear, I am not suggesting a reactionary view. There have always been men who felt that the world was becoming so complex that life in it was too strenuous. I am not here to preach 'the simple life,' not to suggest the 'return to nature.' Neither is it my purpose to plead for progressivism. There is a great deal of that being done, and I am not sure that I know just what is meant by it. Almost anything may be called progressive. Not long ago I noticed an advertisement in a weekly paper of a series of articles purporting to set forth a new sex morality. The reader was urged to 'be progressive,' and read these articles. There are certain religionists who have just discovered what most educated people have been think-

ing for half a century, and are proclaiming a 'progressive religion.' What I wish to know about progress is what it is doing to us? *I wish to know what we mean by progress;* in what *direction* we are progressing; and *what we shall be like* when we get there.

Now, what is progress? I doubt if many people try specifically to answer this question. 'Why, progress is just progress; just general improvement.' Yet it ought to be possible for us to have some definite ideas as to what progress is. In concrete cases we use the term in this definite way. If a man, for instance, has a position where he feels that he cannot succeed, where promotion to a position of greater responsibility or increase in pay seems to be out of the question, he will probably say, 'I think I will leave this job. I cannot make any progress here.' Again, if a person undertakes a task, the completion of which requires some time – like learning to play golf or to make music, acquiring a language, building a house, organizing a movement, or writing a book – his friends may ask him if he is making any progress. Now what do we mean by progress in this sense? We obviously mean the *nearing of a goal, the achievement of an end.* By progress, then, we mean that we are in the way of realizing any sort of purpose. Hence, by the progress of society, or 'social progress,' we mean several things. In the broadest sense, progress would mean the sum-total of all achievements of ends. Anything men are doing could be called progress. The difficulty with this conception of progress is that it is too general, since it includes all the conflicting purposes of men. It is doubtful if we can say that there is more progress now than in former ages, since men have always been realizing some sort of purposes.

Such a general view of progress, then, still further necessitates the determination of desirable ends, otherwise anything becomes progress. Shakespeare's Iago conceives a diabolical scheme for the destruction of the happiness of Othello and Desdemona. He gets on famously. Is his success progress?

A group of dishonest politicians set out to control the government and exploit it shamelessly. Is their action progress? The difficulty is that men cannot agree here as to *what ends* are progressive.

Shall we say, then, that there must *be some special trend* or tendency running through an age in order that there may be progress? Here, too, we are confronted with the same difficulty. Mankind is divided into various struggle groups, each of which believes that there is a tendency making for the achievement of its own ends or for the dominance of its own particular crowd. Thus, the 'Fundamentalists' would interpret progress as the gradual increase in the number of persons who are opposed to the teaching of evolution. The more laws that are passed prohibiting this teaching, the more progressive these people consider our age to be. To the scientist this would not be progress at all. He would conceive of progress as the advance in the naturalistic explanation of phenomena. The Ku Klux Klan feels that the world is progressing, when the partisan religious strife of the seventeenth century is being revived. To the Socialist, progress is the inevitable law of 'evolution and revolution,' making toward the Co-operative Commonwealth. To the Capitalist, progress is business prosperity. To many men progress means the increase of democracy; and yet to Nietzsche democracy was not progress at all, but decadence. Hence, the idea that progress is a single, universal tendency in society or dominant trend is an idea that easily lends itself to propaganda of all sorts. There must be some *criterion* before we can know what is progress.

There is no such thing as *progress in general.* Progress is not a uniform, universal tendency to improvement. What we always see is the rise and decline of some specific curve of achievement. Gothic architecture had its development, and after reaching a certain point of perfection, it remained static, or became corrupted as Renaissance art influenced it. Likewise, Greek sculpture had its rise and decline. Also ancient

philosophy; Egyptian art; Roman imperialism; medieval knighthood; English law, and modern mechanics. Each of these interests has its special day, after which progress in that direction ceases, and no age shows progress uniformly in all respects.

This view of progress which I have just sketched, is admirably set forth by Dr. Alexander Goldenweiser, and in somewhat modified form by Dr. Flinders Petrie in his little book, *The Revolutions of Civilization*. Petrie shows that there have been eight periods of civilization in each of which a special culture has had its rise and decline. He takes sculpture as the basis for his study of these periods, and on this basis would separate the last four civilizations somewhat as follows: – From 4750 B.C. to 3450 B.C., from 3450 B.C. to 1550 B.C., from 1550 B.C. to 450 B.C., from 450 B.C. to A.D. 1240. He suggests that the curve which has its climax at this last date, is now on the decline. He finds that the zero point of sculpture does not come at the same time as the zero point of other arts. Painting reaches its zero point about 160 years later; literature 360; mechanics 550; science and wealth something over 650.

All this means that an age which is on the upward curve in some aspects of its life, is on the downward curve in others. There is no uniformly creative evolution in society. This, then, is progress: the development of some specific institutions of art or science, over a certain length of time. *There is no law of progress in general.* There is as much decline in history as there is advance – different things at different times reaching their period of culmination and subsequent decay. At any period in history, both these processes are taking place. The fifth century B.C. made progress in art, philosophy and science. But at that time, the whole social structure was beginning to crumble, and perhaps the racial stock was already on the decline in the Periclean age. The Roman Empire made progress in government and law until the climax was reached in the Code of Justinian in the beginning

of the sixth century. But during this same period, there was a general cultural decline. So much so that the Roman Empire itself hardly survived the formulation of this code. Yet, Justinian's reign was looked upon as one of great achievement. The Middle Ages made progress in religion and morals, and some progress in the arts. But there was a marked decline in government, industry and scholarship. The Renaissance made progress in scholarship, but there was a great falling off in religion, piety and morals, and some scholars maintain that even Renaissance painting and sculpture are decadent.

So the idea of progress in general is a faith. It is a democratic faith. As a faith, it has value in that it gives those who hold it a certain youthfulness of spirit and forward look, but it does not necessarily make for profundity of thought or soundness of judgment. In one sense, a psychological sense, it is, in part, a device for the self-justification and idealization of the mass. As power comes to be more and more committed to the average man, that man feels that the world is making progress. He naturally believes in himself, and his own future. The mass feels that as a mass it will achieve a utopia where the wise men of the past have failed. The faith in progress also comes in as a handy justification of the abuses of a democratic age. Is the world cheap and tawdry? Have the chosen representatives of the mass made a mess of government? Has the general advance of culture among the people been slow and something of an imitation of the real thing? Do ignorance and superstition still prevail? Only be patient, for progress will remedy these things automatically. 'The cure for democracy is more democracy.' The age of the common man must inevitably turn out to be the goal of all history. Surely the masses do nothing but create progress.

I do not wish to dispel this comfortable illusion. But as progress is always along some specific line of development, it is created by the few who are the special workers in some particular field of endeavour. Progress in scholarship is

created by a succession of scholars; progress in art is created by artists. The only conceivable general progress would be improvement of the racial stock. It is a favourite dogma of democracy, that the racial stock may be improved by manipulating the environment, and many efforts have been put forth in the attempt to do this. They have not, however, been very successful. The weight of biological opinion is on the side of those who argue that the racial stock may only be improved by selective breeding, and there are many who maintain that the race instead of improving is on the decline, inasmuch as in any generation it is the finer human types who do not reproduce their numbers.

What then is progress? It is, as I say, *a specific development of a certain aspect of life for a short period.* It is achieved by a few people while other aspects of life remain static or turn decadent. The fruits of this progress may or may not be enjoyed by society as a whole.

§ 2

THE DIRECTION OF PRESENT-DAY PROGRESS

We have seen what progress is. Now let us try to discover in what direction progress in our own day may be moving. To make this discovery, we shall be obliged to examine various specific factors in our civilization, to see whether they are on the upward or the downward side of the curve of progress. We shall take as a criterion the fact of *creativeness.* Where new and original thinking is taking place, we have progress. Where there is only imitation and standardization and repetition, and where the changes which occur are indicative of a less vigorous expenditure of mental effort, we shall say that we are witnessing a decline. This is the only criterion that we have, because if we should try any other, we should prejudice the case. We ought not to judge the tendencies of the times by arbitrary and a priori attempts to

predict the future. We should then be assigning ends rather than describing processes. Our age is undoubtedly tending in the direction of those achievements in which there is most original, creative interest. It is just where there is creative activity, that there is progress. Let us now discuss some of these specific elements in civilization.

I think most people will agree that in *mechanics* we are still on the upper curve of progress. The development of mechanical contrivances goes on at an accelerating speed. Here there is creativeness and imagination. There is a rapidly increasing body of knowledge. Experiment, rather than appeal to tradition, characterizes thinking about mechanical matters. During the last twenty-five years, very revolutionizing inventions have appeared, such as the aeroplane, the development of the automobile, wireless, and the amazing advance which has been made in electrical mechanics. The next fifty years may be expected to bring still further new achievements, and hence still further to revolutionize industrial processes. We cannot predict what the end will be, because we cannot foresee inventions which have not yet appeared. Neither can we forecast what the social effects of such inventions will be. But we can, with some assurance, say that the development of mechanics, together with the effects of such development, will in one hundred years make the world so different from what it is now, that we, could we come back to life then, should find ourselves in an environment which would be more strange to us than ours would be to Galileo, could he come back to earth to-day.

As with mechanics, so with the *organization of industry*. During the last generation a large number of the most able men in the world have sought their careers not in the learned professions, but in the management of business. Business to-day is very different from business seventy-five years ago. New methods are devised; a new technique is being developed. Vast organizations and far-reaching projects are envis-

aged and carried through with amazing foresight and skill.

There are some persons who do not agree with what I have just said. It is a common belief among certain schools of radicals that the present capitalist system is breaking down. There are indications of this fact in Europe; most of them are the after-effects of the war; and it can be said with much truth that capitalist interest had something to do with causing the war. But even bankrupt Germany had its Stinnes. British finance has been able, in spite of most difficult conditions, to stabilize British currency and to carry burdens undreamed of before the war. American financiers were never so powerful as to-day. On the whole, I should say, that the apparent breakdown of the capitalist system in certain countries is more the result of the breakdown of government than a decline of business sagacity. Even should some form of socialism be substituted for our present system of private ownership, it is conceivable that the creativeness in industrial organization might continue. Dr. Frank Bohn says that we are on the verge of a development of super-capitalism, and that the organization of business will, in the next fifty years, reach such heights that it will tower above our present level, as the modern departmental store towers above the old one-room shop of last century.

There is *science*. The scientific age is by no means over. One writing at the close of the twentieth century will probably find that the development of science in this century will have far exceeded that of the previous one. I need only mention the new developments with radio-activity, and the amazing work which is being done on the structure of the atom, to show that we are on the verge of undreamed-of advances in science.

Let us now turn to *the standard of living*. To many minds this is one of the prime indicators of progress. As I see it, there are two tendencies to-day, in the general changes that have taken place in the standard of living. Social psychologists have defined the standard of living as follows: 'A man's

standard of living consists in the acquirement of those things which he insists upon having even if he is obliged to forego marriage and parenthood.' That is to say, men may be separated into various groups. Some people will marry with no prospects, and are quite willing to beget children in abject poverty. Their standard of living is very low. Others postpone marriage until there is some degree of comfort. The number of their offspring will be limited, so that they do not have more children than they can provide for, with some expectation of giving their children better opportunities than they themselves had. Others, let us say, the persons of aristocratic or genteel lineage who have suffered reverses, may forego marriage altogether, because they cannot live in the circumstances to which they were born.

Now the significance of all this for social psychology consists not merely *in the amount* of things which people insist upon having before marriage and parenthood, but *in the kind of things* they demand. Or course, the amount of property insisted upon has great social significance, for it is obvious that those who are willing to have large families without adequate means of supporting them are, on the whole, endowed with less foresight and capacity for sustained effort and self-control, than those who in the same economic condition demand a higher standard of living. It is a sociological fact that the former type produce by far the largest number of children of any class in society; while those whose standard of living is higher tend not to reproduce their numbers. Many biologists see in this fact a serious disgenic selection for parenthood; in other words, it makes for the survival of the unfit. They maintain that the mental qualities which cause people to be content with a low standard of living are inheritable, and hence they argue that the racial stock must inevitably decline. Of course, where there is a declining racial stock, there cannot long be progress in any direction, inasmuch as genius may, by the wrong kind of selective breeding, be bred out of a race.

When we come to consider the second factor in the standard of living, namely, the kind of things which constitute it, for different types of men, we see evidence of the divergent tendency of which I spoke a minute ago. On the whole, the standard of living judged in *amount* of goods possessed, seems to be rising in western civilization, owing largely to the greater increase in production. But if we consider the *quality* of goods possessed, perhaps a brief historical sketch of what it is that has set the standard of living may be of interest to us. Thorstein Veblen, in his book, *The Theory of the Leisure Class*, if I understand him correctly, argues that in times gone by, the master class indulged itself in what he calls 'conspicuous leisure.' Men displayed their wealth, because such display gave evidence of the fact that they were masters of many servants, and social position came to be associated with such display. I think that this is only partially correct. Many of the gentry of the seventeenth and eighteenth centuries, and before, have often been comparatively poor. But they have insisted on a certain degree of culture, education, good taste, and genteel manners. These things came to be the hall-marks of gentility. *They were more insisted upon than was the mere possession of wealth.* In fact, the aristocrat and noble have always regarded the rich man who did not have these things, with ridicule and contempt. Wealth, therefore, for the upper class in old societies was not an end. It was rather a means, necessary for the leisure required to support a high degree of culture. It was in this culture rather than in mere possession that the noble and the gentleman felt themselves superior persons.

At the time of the French Revolution in the eighteenth century a class of plebeians, the bourgeois, had risen to such wealth that its members often possessed more of this world's goods than did the gentry or aristocracy. But the bourgeois class lacked the culture of the latter. Hence its members – of course, there were many notable exceptions – tended to make possession of wealth a criterion of personal superiority,

because wealth was a thing they themselves possessed; and to this they added a sort of *imitation* of the culture which characterized the older upper classes. With the opening up of industrial opportunity in America, vast numbers of plebeians worked their way into the class of the wealthy. Wealth became an end, a mark of distinction, a criterion of success. One had to keep up with one's neighbour. The standard of living consisted more in the possession of things than in the attainment of culture, and this is so to a large extent in America, and elsewhere, to-day.

Now just as the business class imitated the gentry, and in a manner put on their culture from the outside, so the masses to-day strive to imitate the successful business man, to dress like him, to lay emphasis on what he has, and so forth. Certain psychologists recently made a study of the number of children who attend high school. The children whose parents were members of learned professions were found to outnumber many times those whose parents belonged to the artisan class, whose incomes were practically identical with those of the professional class. This means that a very large proportion of the masses, even when their material standard of living is raised, does not insist upon education. The tendency is rather to spend money for imitations of the things the rich have. Thus, if Babbitt rides in a Rolls Royce, Henry Dubb wants a Ford. If Babbitt's daughter wears a sable coat, Henry's daughter must have a coat of dyed cat fur. If the employer buys a player piano, Henry must have a cheap gramophone. Both play jazz. If the tired business man must have his cabaret, the tired worker goes to a cinema. Neither insists on a very high standard of entertainment. Babbitt takes his holiday on the Riviera, and Henry Dubb his week-ends at Southend. Both places are very much alike. Both Babbitt and Henry agree on despising 'highbrows.' Both can, without serious feeling of deprivation, get along without even a bowing acquaintance with the cultural values of civilization.

This means that even with a general increase in the wealth per head of population, the real standard of living may be on the decline. A community much poorer than ours may very easily have a higher standard. We are to a large extent content with a general shoddiness and spiritual cheapness, which a more fastidious community, even though living in what we should call great poverty, would not endure. This accounts for much of the ugliness and tawdriness of modern life. It is seen in our journalism, and in our literature. We have a further illustration in the type of hero which the populace worships. Compare the space which the newspapers give to an account of the death of a well-known jockey with that allowed to the death of a great scholar. I think this contrast throws some light upon our standard of living so far as values are concerned, and I should say that here we are, on the whole, on the decline.

I have not the time for adequate discussion of some of the other trends in modern civilization. We must be content with brief mention of them. There is *religion*. If we compare religion to-day with religion in the Middle Ages, we note a contrast. I am not an apologist for religion, but it must be said that religion does not occupy the place in men's lives that it once did. Religious institutions no longer command the same respect of men, and no longer attract to the clergy the same type of scholarship. Religious beliefs are not held with the old implicit faith. I am sure that an unbiased view of the facts will lead us to say that we are decidedly on the downward curve so far as religion is concerned.

The same is true of *government*, though in a different way. Government to-day appeals to popular imagination. We are still in the political epoch of history. There has been much talk about the progress of government. For the most part, this progress has consisted in two things. First, the extension of the functions of government to matters which have hitherto been left to private enterprise. Second, the extension of the franchise, with the effect that government takes on more and

more the character of direct democracy. That is, government becomes more and more representative of the mediocre man at the very time when it is attempting tasks which are necessarily difficult. The total result is a loss in statesmanship, a tendency to substitute passing fancy for political principles, a tendency toward coerciveness, restrictive legislation and quixotic and ill-considered reform movements. At the same time, the intellectual level of the personnel to whom the tasks of government are entrusted has sadly declined. The influence of the lobby is greater than ever before. As far as the United States is concerned, the legislative branch of the government, both state and national, is notoriously undependable and insincere. Huge majorities in both houses, in order to gain the support of well-organized self-seeking minority groups, have again and again supported measures so ill-advised, that most of those who voted for them, did so hoping that they would meet defeat at the hands of others more sincere and courageous than themselves. Corruption in office extends to some of the very highest positions in the government. It is probably not an exaggeration to say that government to-day in the United States is at the lowest level it has reached in a century.

In *morals* there is a tendency toward greater conformity and elemental decency. In some respects, open prostitution is no longer so flagrant as formerly. Drunkenness has greatly declined, and doubtless there are other indications of change for the good. But there is another tendency also. I do not refer here to the greater freedom which characterizes the present generation, for I believe that in this freedom there is a decided moral gain, notwithstanding the fact that many conventions are disregarded and many prudish persons horrified. I regard the 'flapper' as one of the most sincere moral reformers among us. What I refer to is precisely the thing which our professional moralists are attempting to achieve: the substitution of external control for personal responsibility; the removal from the individual of the need for choice

between good and evil, and the placing of it in the hands of government officials. Hence the growing preponderance of deference to authority over private judgment. Hence, also, an increase in furtiveness and hypocrisy, a cessation of original thinking and creativeness in moral endeavour, an undue influence given over to unqualified and amateur meddlers, a removal of temptation which gives fools an advantage in the struggle for existence, and hence is positively disgenic. We are, therefore, tending to formalize the moral interest, to make it a matter of rules instead of a consideration of ends; and this means that morals are already on the decline.

Finally, let me say a word about *education*. There are probably more people who have a smattering of knowledge than ever before, but the difficulty is that these people think they have 'got' an education. The idea prevails that education is something for which you go to school or college, and bring home in some sort of invisible package, which most people lay upon the shelf and never look at again. In extending education to such large numbers, the general standard has been lowered. Of course, there are highly trained professional scholars. But the mental level of the average college graduate in the United States is probably lower than that of the university student of two or three centuries ago. As an illustration, let us take the standard of scholarship required there for a doctor's degree. In Erasmus's time it was necessary for a student to have a thorough command of the classics before he could even receive his bachelor's degree, and the Universities of Louvain and Paris required twelve years of study beyond this before he might be honoured with the degree of doctor of divinity. I know Americans to-day who have this degree and yet can scarcely read and write. Scholarship, aside from science and philosophy, and in the sense that scholarship means knowledge of letters, has not made great progress.

Now let us sum up what we have said, and see in what direction progress is tending. In mechanics, in industrial

organization, in science, and in the general possession and distribution of wealth, the curve is upward. In the cultural values of civilization, there is a general decline. Now it is in these last that the mass as mass has had an influence, such as it did not have in former times, and this means that in all lines of activity where the average man exerts an influence the effect has not been so much a rise of the mediocre man as a mediocritization of culture. In other words, *democracy tends to vulgarize and cheapen everything it touches*. Now if we consider all these present trends in their relation to one another, we see that the development of science and organization and machinery mean that we are progressively gaining *power*; for all these things mean power – power over nature and power over other men. This is the main result of progress in our day, and it is valuable. It tends to transform all the relations of men both to nature and to one another.

If power can be wisely directed, toward well-considered ends, we may feel that the progress in the directions which I have indicated is a real gain for human life in general. But the ability to choose these *ends*, that is to create value, depends upon something that cannot be given us by mere accumulation of power. It demands an interest in that which is qualitative and not quantitative. It consists of acts of choosing, which must be guided by consideration for the cultural values of civilization. The end and aim of every civilization is cultural, and without a keen appreciation of such an aim, civilization must decline. Now it is precisely in this capacity for appreciation that we have seen a decline rather than an advance. In a word, to answer the question, in what direction is progress moving? I should say, taken as a whole, it is moving in the direction of a standardized and mechanized order of life in which man as mass – that is, undifferentiated mass, or mediocrity – becomes dominant, without that degree of culture which in all times has enabled men to give to life a meaning. Perhaps it would be an exaggeration to say that we are tending to become highly

efficient barbarians. But certainly the organization of power, along with the tendency to intolerant mass action, shows very little respect for quality. Dictatorships may be set up in the name of the masses, in which there is efficiency and love of power, but in which there may be no real community. In other words, there is a tendency toward ruthlessness and sheer power of numbers, a regimentation of vast hordes often directed by a desperate minority. We see this in Russia in the dictatorship which has been set up in the name of the proletariat; we see it in the Fascisti movement in Italy, in the dictatorship in Spain. In the United States, it is evident in such movements as Fundamentalism, Prohibition, the Ku Klux Klan, and various so-called reform movements.

§ 3

WHAT WILL OUR PROGRESS MAKE OF US?

This leads us to the question, What shall we be like when we attain the ends toward which we are moving? Of course, no one can tell, because the unforeseen may always happen. New creative forces may be liberated in directions which we cannot predict. But it is safe to say that society as a whole is moving in the direction of the *type of man* who receives most consideration, and whose dilemmas set the standards of value. That man to-day is the mediocre or *sub-mediocre* type, the 'low-brow.' We see his influence everywhere. It is to protect him against his own characteristic temptations that laws are made. It is in the attempt to please him that the wireless telephone, a splendid piece of mechanical progress, so frequently becomes devoted to banalities. In fact, the quality of the average radio-programme in the United States illustrates what I have to say.

It is because the cinematograph has to appeal to the same type of man that the 'films' are what they are. The same holds true of jazz, and politics, and journalism. If this sort of

thing continues long, aided as it is by our quantity production methods and general tendency to standardization, we shall be globe-trotters, without the spirit of cosmopolitanism; newspaper readers, but illiterate; high school educated, without culture; gregarious, without sociability; political, without statesmanship; comfortable, without elegance or poise or grace.

The question is then, is it possible to control progress? It is not possible for the mass as a whole to control progress, for progress is created by the few. But *it is possible for somebody to control it*. In fact, it has always been the special task of somebody to control it, down to the present time. The trouble with progress to-day is that *no one* controls it. *The mass* is trying to control it. If we are to avoid the inane condition I have tried to describe, an increasing number of people must dare to stand out against our prevailing standards of mediocrity. They must take upon themselves the task of creating progress in those very things in which to-day, because of the influence of the mass, there is a decline. I do not mean that we should deliberately wrest from the majority the right to have any say about the cultural values of civilization. I do not believe in a dictatorship of any kind. But I do believe that the world is all wrong when wise men are obliged to submit to the ways of foolish men. There must be a conscious effort to keep alive the love of beauty and truth. I do not mean a sentimental love. I mean that it is possible to conceive of a world, the civilization of which is such that a Socrates, an Aristotle, a Cicero, a Montaigne, an Erasmus, and an Emerson, would feel at home in it. The truly educated man knows what that world would be, and he must stand up for it, and never compromise the ideal of it in order to gain favour with the crowd.

For in the end, even the multitude cannot endure too great a vulgarization of value. As a matter of fact, the average man is alway seeking to *get away from himself*, and from the very drab and inane order of life which his own ways create.

Again, there must be kept alive a *sense of human worth.* There is much said about this to-day, but most men mean by it the perfectly obvious fact that every human life has value for the man who lives it. But aside from this subjective point of view, to say that that value is *equal* is untrue. There can be no real sense of human worth unless there is a keen appreciation of the fact that some men are by nature spiritually superior to others, and have the natural right and duty to determine the ends and values of civilization. This is their true social function, and they do not need to be elected to office to perform it. If we ignore this distinction of worth among men, as there is a tendency to do to-day, we deny that any human achievement or virtue has value.

As I have said before, we conceive of progress as something which moves along on a horizontal plane toward a goal which all men are to share alike, as if the race were all marching along the road toward some ideal social order. This is not a correct picture. *The line of progress in everything is vertical, not horizontal.* It corresponds precisely to the distance which some men may rise spiritually above others, just as the evolution of the race rests in the fact that mankind as a whole is on a higher plane than the apes. The progress of the world, therefore, consists in the very same things as do the spiritual values – in the superiority of some men over others. This is not a popular idea. But it is nevertheless true. And thoughtful people in all classes are beginning to recognize it.

Finally, we must keep alive the spirit of *liberalism.* This is one of the rarest things in the world, and one most easily lost. Without it, our tendency toward a standardized and mechanized world means that we are running head-on into tyranny. Human nature cannot permanently endure tyranny. This has been proved again and again, whether that tyranny exists in the name of God or king, or of the proletariat or the democratic majority, or of patriotism; whether it be a tyranny of capitalism or of prohibition or of bolshevism. Tyranny crushes the heart of man, enslaves the noble spirit, and makes

of the ignoble a sycophant and a sneak. It gives some men power to interfere with the behaviour of others in matters that, for the common good and for the self-respect of all, must be decided by each for himself, even at the risk of deciding wrong. Tyranny gives the fool and the knave an advantage over the wise man and the honest man. It means always corruption, favouritism and inefficiency. Tyrants, whether crowds or kings, become mad with the sense of power, and for sheer love of it destroy themselves in the attempt to do the impossible. Tyranny makes itself ridiculous, and its victims tragic. It always justifies its folly by taking refuge in the assumption of divine authority or moral principle. The king rules by the grace of God; the mob by the precepts of Righteousness.

The will to play the tyrant exists in every man. It is one of the deadly sins to which human nature is ever prone. Some men play the tyrant by wearing crowns; some by bullying their wives and children and employees; some by a show of concern for the moral welfare of their neighbours; some by lording it over the fools whom they can convert to belief in, and devotion for, some dogma or movement; some by uniting with others in a crowd, which in its protest against the feeling of inferiority, gives itself airs and speaks in a holy tone, and promises to itself, that is, its members, that 'every knee shall bow' to its idols.

If we are to escape from tyranny, vulgarization, and standardization, if civilization is to be worth what it has cost in effort and struggle, if the vast accumulation of power which our age is coming to possess is to be directed toward ends of general human advance, there must be a rapid increase in the number of persons who know what liberal education means. It is that training which sets the mind free – free from superstition, credulity, rationalization, and bad habits of thinking. There must be urbanity, capacity for suspended judgment, and self understanding, as well as 'idealism' and appreciation of value.

It is in this sense that psychology has educational importance. I do not say that psychology is all; by no means. The student should, if he has not done so before, develop an interest in classic literature, in general philosophy and natural science. I can only hope that what has been said in these chapters may have brought him some help in the formation of new habits of thinking. I have not presented this subject as if psychology were a device for easy success, nor as a receipt for manipulating our neighbours or deceiving ourselves with false optimism. Our aim has been to attain insight such as will enable us to know when we and others are merely rationalizing, and when we are trying to solve real problems. By means of this insight, we should be better able to see the true meaning of our behaviour, and to make some progress at least in self-control, and in a knowledge of what is worth doing, which is, after all, the same as a knowledge of men. It is only with such knowledge, and under the voluntary leadership of those who have it, that social progress can ever create or preserve the things which differentiate men from monkeys, and distinguish the civilized man from the savage.

With the key of the secret he marches faster
From strength to strength, and for night brings day,
While classes or tribes too weak to master
The flowing conditions of life, give way.

Emerson – 'On Education.'

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